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THE

MARYLAND FARMER:

DEVOTED TO

Agriculture, Horticulture, and Rural Economy.

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THE LABOR AND IMMIGRATION CONVENTION.

On the first of June the Convention for the promotion of Labor and Immigration in Maryland met pursuant to notice at Raine's Hall in Baltimore. The meeting in December of last year was altogether preliminary; that which assembled last month was to receive the report of the committee previously appointed and for the purpose of organization.—The attendance was by no means so large as on the previous occasion, but the delegates consisted of earnest men, who desired that some action should be taken looking to practical results. The report of the committee was an excellent paper, and set forth in strong, plain language the objects to be sought, and the means of attaining them. Colonel Earle offered a substitute, however, which looked to an appropriation from the State to the amount of two hundred and thirty thousand dollars. The principal speech on the occasion was by Mr. Raine, of the *German Correspondent*. He controverted the views of Col. Earle, deprecated an appeal at this time for State assistance, and counselled self help. Various other speeches were made, from which it was manifest that the opinion of a large majority of the delegates was in consonance with that of Mr. Raine, and adverse to the views of Col. Earle.—The final result was the passage of a resolution looking to a more perfect organization in the Counties before any further action was taken, and on the vote being declared the Convention adjourned to meet again at the call of the President.

Governor Bowie presided on the occasion, and the entire proceedings of the Convention went off well. We think the resolution adopted was a wise one. There can be no doubt that much requires to be done before the measures proposed can be carried into successful operation. The principal duty necessarily devolves upon the Counties. It is a matter in which they are deeply interested, and it is upon their hearty co-operation with the International Immigrant Association, which has its central office in Baltimore, upon which the success of the movement depends. If we are to attract immigrants to Maryland there are several things that must be done. Each of the Counties needing settlers and field hands must set forth the special advantages which they can offer to immigrants, the nature of the soil, the rate of wages, the price of lands and the facilities of transportation to a market. Moreover, the planters must meet together at some central point in each County and put on record the quantity of land they have for sale, where situated, what the condition of the several tracts is, and at what price such lands may be bought. Until this is done nothing can be accomplished. But very few immigrants can be induced to remain in Maryland after landing at the port of Baltimore, for the simple reason that it is customary for them to make up their minds in respect to their point of destination in the United States before they leave home. They derive this information from emigration agents established abroad, or from correspondence with their friends in this country. If, therefore, it is desirable to induce them to settle in Maryland they must be approached at their old homes, and must be furnished with all the details which are necessary to give them a knowledge of the advantages which our State offers to enterprising and industrious men. The principal trouble in diverting the current of immigration from the sparsely populated States of the great West lies in the fact that the drift of emigration has now for quite a number of years been in that direction, and thus large settlements have grown up, to which emigrants of the same nationality very naturally gravitate. If, then, we are to attract a similar class of emigrants to Maryland, our first effort must be to establish small colonies of them in different parts of the State, where lands can be had at a price which will justify them in buying them for

the purpose of making among us a permanent home. When once these little colonies are formed, other emigrants will be drawn to them, and the subsequent work of the County Associations will be comparatively easy.

There can be no doubt, in our opinion, that emigrants would find it much more to their ultimate advantage to settle in Maryland than on the wild lands of the West. Here they would have at once all the benefits arising from roads and markets, schools, churches, and an established population. There they would literally be obliged to begin life anew in the wilderness—to build, to fence, to clear, and finally to wait until population comes to them. Here they would have markets close at hand, and the highest prices for the products they raised.—There they would find the markets remote from them, the cost of transportation heavy, the rate of wages quite as high as with us, and the price of their commodities so low as scarcely to pay the cost of raising. In every aspect of the case the lands of Maryland are cheaper now than those at the West, whilst the markets are infinitely better, and the social advantages greater beyond all question.

Destruction of Worms in Lawns.

An English horticulturist says, that when worms have so infested a lawn that they threaten its destruction, the destroyers may be destroyed by the use of corrosive sublimate, according to the following directions:

"The quantities given are suitable for a lawn about 30ft. by 20ft. Dissolve 3 oz. of corrosive sublimate in cold water (which is more readily effected by first reducing the corrosive sublimate to powder, and adding, at the same time, about 2 oz. of murate of ammonia) this quantity is sufficient for twenty-four gallons of water. Sprinkle the grass-plot with this solution by means of an ordinary watering-can, and the surface will immediately be covered with worms—large and small, wriggling in agony. He picks them off and throws them into salt, though no doubt they would die if not removed. It is better to apply the solution in wet weather. The grass is not injured by it, but should it turn yellow for a short time it soon recovers its green color, as the roots are not injured. The corrossive sublimate is a most deadly poison, and of course, requires care. This is generally sufficient for one season, but as the borders round the grass-plot cannot be sprinkled in the same way, they generally furnish a fresh supply of worms by the following season."

A man too busy to take care of his health, is like a mechanic too busy to take care of his tools.

THE WHEAT CROP.

From all quarters there comes to us reports giving an unusually favorable account of the wheat crop. Taken as a whole, the product, according to the accounts published in local papers throughout the various States of the Union, and to the careful statistics which have been collected by the Agricultural Bureau at Washington, the yield will not fall below that of last year. In a majority of the States there has not only been grown a larger acreage of wheat than usual, but the crop is reported to be a full average. This is especially said to be the case in the Middle and the Western States. On the Pacific Slope, on the other hand, owing to the long drought, there has, however, been a marked falling off, although it is believed that enough has been grown for home consumption. The deficiency in the Pacific States, where there has been for some years past a large surplus for exportation, will throw the burthen of the exports of wheat to Europe on the Middle and nearer Western States, and to the extent of the foreign demand—whatever that may be—will tend to keep up prices. So far as Maryland and Virginia are concerned, and these are the States in which our farmers and commission merchants are most interested, a careful collection of the reports from nearly all the counties, shows that a fair average crop has been raised. It is true that in some localities, especially in Maryland, there are complaints of rust, and that the heads of the wheat are not well filled, but the deficiency in some counties appears to be made up by the larger yield in others. A very remarkable circumstance is the earliness of the harvest. In Washington and Frederick counties the grain matured from fifteen days to a month earlier than usual, and in nearly all parts of the State the grain will be harvested before the usual time. The other crops are more variable. In the Western counties oats and grass are both reported to be good, but on the Eastern and Western shores these crops will be generally short. Corn, though not so much advanced as wheat, is nevertheless looking generally well, and promises at this time a good yield—the late rains, and the setting in of warmer weather, proving very beneficial to the growth of this, the noblest of cereals, even in places where it was previously represented as backward. The greatest complaint in Maryland is of the tobacco crop. Thus far the plants have fared badly, and it is believed that the yield will be far below an average, and much lower than the planters had reason to hope. Rye seems to have done well everywhere. Indeed, this crop on land of even moderate fertility, will stand a drought better than any other, except, perhaps, barley. Of barley, however, very little is grown in this State; the climate

and the soil of Pennsylvania, and from that northward, being apparently more favorable to its growth.

We may say, then, from all the accounts that have reached us, that the general product of the wheat crop this season will be fully up to the mark of last year; and that the prospects of a good corn crop are favorable. We do not venture upon a statement of the cotton crop, for that is not only beyond our province, but is still subject to so many conditions which will affect the product, that any speculation in regard to it would be hazardous.

Of all other agricultural products the survey is undoubtedly favorable, and this fact will undoubtedly exert a salutary effect upon the general trade of the country. It is of course, as yet, by far too early to ascertain what the demand for our breadstuffs and provisions will be from abroad, for the reports have not yet come in from the Baltic and Black Sea provinces, from which, when the seasons are good there, the rest of Europe draws the larger portion of its supplies. Thus far, however, in England the accounts are favorable to a fair average crop; what it will ultimately turn out to be depends nevertheless upon contingencies that are yet to arise, and particularly on the state of the weather at harvest time. The crops in Germany, in spite of the drain upon the laboring population that was caused by the war, are said to promise well. In France alone there is a positive certainty of a deficiency, and the absolute necessity of drawing upon foreign countries for heavy supplies.

As to future prices no estimate can at present be made. But one thing all farmers will be wise in doing—that is, to get their wheat out as early as possible, and so be able at any time to take immediate advantage of a favorable market.

GRINDING FODDER FOR DOMESTIC ANIMALS.—The practice of grinding or crushing hay and straw, instead of the usual method of chopping it, as an article of food for domestic animals, is coming very much into favor. The digestibility of these substances, as is well known, is much increased by steaming and softening with water; but a very marked improvement in the condition of cattle, it is said, is speedily observed in consequence of the adoption of the process referred to. It is maintained, also, that horses fed with ground hay are much less liable to suffer from attacks of colic than when the food is chopped, and that an appreciably smaller quantity will supply sufficient nutriment, less passing off in the form of undigested fiber. The operation of grinding is effected by means of millstones, or any other conveniently adapted arrangement, a very soft article of food being produced, which is extremely acceptable to the cattle.—*Agricultural Report.*

Our Agricultural Calendar.

FARM WORK FOR JULY.

Owing to the extreme earliness of the season, the wheat harvest which usually occurs in this latitude about the first of July will be well advanced in Maryland. In some parts of the State the crop has matured nearly a month earlier than usual. In other parts from fifteen to twenty days. But although the wheat is well forward, there are other crops to be looked after. The corn is by no means so well advanced as the wheat, and cultivation of it must still be continued. The oats are ripening in many places, and, on the whole, are far from being as promising as the wheat. But rye, which stands a drought better than most cereals, looks well. There is, therefore, much still to be done in the way of farm work, and no pains should be spared to promote the vigorous growth of those crops still under tillage, or to prepare in due season for the harvests that are yet to mature. The work for the month is as follows:

Cultivation of Corn.

The backwardness of the corn crop, as compared with that of wheat, renders it necessary, in many parts of the State, that its cultivation should be continued. It is very often the case that the corn is sufficiently well advanced at the period of wheat harvest that it can be safely laid by. At the present time the earliness of the wheat harvest has checked in many instances the usual cultivation of corn, and the work has now to be vigorously prosecuted. Every good farmer knows that the vigorous growth of corn depends largely upon frequent stirrings of the soil—that the lighter and more pervious the soil is made to the air and the summer rains the better it is for the plant. After the corn has reached the height of three feet—it is not, however, advisable to use the plough for the lateral roots—have them spread across the intervals between the rows, and are in danger of being torn and mutilated. At this stage of growth, and subsequently, the shovel, the cultivator and the hoe are the only implements that ought to be used.—There is, moreover, a general belief, that except on slopes, hilling of corn is not beneficial. On flat surfaces, where the soil has been ploughed deeply in the first instance, it is undoubtedly better to dispense with hills, so that the entire surface may catch the rain fall. The old method of throwing furrows to corn is only advisable on hillsides, and then the rows should be so laid off as to catch and retain as much of the rain fall as possible. To run furrows down hill is to invite the formation of gul-

lies, and the process should therefore by all means be avoided.

Harvesting.

In many parts of Maryland, and wholly at the South, the wheat harvest, owing to the remarkable earliness of the season, is already over. There may, however, be some places in which owing to peculiar circumstances, or local causes, the wheat has matured more slowly. If such is the case, we simply remark here that the cutting ought to commence before the grain is fully ripe—the best time being when it has acquired the consistence of stiff dough, which may be ascertained by pressing a sample of the grain between the thumb and forefinger.

Harvest Drink.—A most acceptable harvest drink may be made by mixing together ten gallons of water, one quart of cider vinegar, one gallon of molasses, and one pound of ground ginger. Such a beverage is at once refreshing and invigorating.

Millet.

Wherever the hay crop is short and an additional amount of forage is required, a few acres of millet will prove serviceable. Though late in the season, the seed may be sown up to the 10th of the month. Choose, if possible, a light, loamy soil, either naturally rich or made so by proper manuring.

Quantity of Seed to the Acre.—When for hay, sow one bushel per acre; when for grain, three pecks per acre.

Fertilizers.—Twenty two-horse cart loads of well rotted stable manure, or 250 pounds of ammoniated phosphate.

Time of Cutting.—Cut when about one-third of the seed begins to turn yellow. If cut late the seed is apt to shatter badly.

Broadcast Corn.

For additional forage, an acre or two of corn broadcasted will be found of decided advantage.—Make the ground very rich, plough deep, pulverize well and sow the seed early in the month.

Quantity of Seed to the Acre.—Sow not less than three bushels of seed to the acre.

Buckwheat.

This useful grain may be put in the ground up to the 10th of this month. The haulm is not worth much for forage, as compared with millet or broadcast corn, but the value of the grain when ground into meal is too well known to all lovers of buckwheat cakes to need any eulogy from us.

Preparation of the Land.—Make the soil rich. If fertilizers are used, prefer those that are immediately soluble—as, for instance, the phosphatic guanos—at the rate of two hundred pounds to the acre. Broadcast one-half of the guano and plough under. Then broadcast the other half and harrow in with the seed. Sow one bushel of seed to the acre.

Time of Cutting.—Begin to cut when one-half of the grain turns black. If the haulm is to be used for forage, cut as soon as the plants come into bloom.

Fall Potatoes.

Keep the vines well cultivated and hoed, and that the soil is kept free of weeds and perfectly loose and open. Potatoes will not grow freely in a close, compact soil. If fertilizers are needed, scatter over the hills a mixture of 10 bushels of wood ashes, 1 bushel of plaster, and 1 bushel of salt. This will suffice for an acre, and under any circumstances the application will prove beneficial.

Fall Turnips.

Preparation should be made in due season for seeding the usual crop of fall turnips. The work ought to be completed before the close of the month, or not later than the first week in August. The better practice is to sow during the last week in July, as early sowing gives an opportunity for re-seeding if the plants should happen to be cut off by the fly.

Preparation of the Soil.—If the ground is not in sward it should have at least two ploughings.—Sward land should be ploughed earlier in the season, so as to allow time for the sward to have become partially decomposed before seeding. The ground should be harrowed and cross-harrowed until the soil is reduced to a fine condition of tilth.—In ploughing, plough deep, taking care, however, not to disturb the subsoil unless it is of good quality. When all is harrowed smooth, either lay the land off in drills two and a half feet apart and manure in the drills with well rotted manure, as if for potatoes, or, if the seed be broadcasted, manure before the last harrowing with short manure, and work it well in. There is, however, nothing better for producing a good crop of turnips than a mixture of super-phosphate of lime, wood ashes and salt, at the rate of 250 pounds per acre.

Quantity of Seed to the Acre.—One pound of seed to the acre will be ample if broadcasted. If seeded in drills a less quantity will suffice.

Sheep.

Provide a trough under cover in the pasture and spread over the bottom of it three times a week as much tar as will cover it. Over the tar sprinkle salt. In getting at the salt the sheep will smear their noses with the tar, and thus prevent the fly from laying its eggs in their nostrils.

Peach Trees.

Examine the peach trees during this month about the crown of the roots for the grub that infests the

bark. The presence of gum will indicate that the worm is at work. It will then be necessary to follow its course under the bark and cut it out. Finally, plaster the wound with a mixture composed of two parts of soft soap, 1 part of flour of sulphur, and 1 part of salt. Scatter some wood ashes and lime about the stem and then return the earth.

Caterpillars.

Examine the fruit trees for caterpillars and destroy them.

Budding and Inoculating.

The proper season for budding and inoculating plum, cherry, apricot and pear trees is during this month. The exact time is best ascertained by testing when the bark parts most freely from the wood.

Ruta Baga Turnips.

Keep these free of weeds and frequently hoed.

Wet Lands.

Drain these as speedily as possible that they may be got in good condition for fall ploughing.

Fences.

See that these are kept in good repair.

How to Make Good Cement Walks.—Having previously graded and rolled the ground, heat your tar very hot, and with a long-handled dipper begin at one end of a pile of quite coarse gravel, pouring on the tar, quickly shoveling over and over so as to mix thoroughly. Cover the ground two and a half or three inches deep with the tarred gravel and then roll. Clean the roller with a broom as you proceed. Then put on a layer of finer tarred gravel one and a half inches thick, and roll. Then sprinkle the surface with hot tar, spreading the tar with a broom; finally, cover the surface with a light coat of fine sand, and your walk is complete, ready for use. It will improve in hardness by age. Provide portable tar kettles, screens, a roller not very heavy, and tools for systematic work, and you can hardly fail to derive satisfaction.—*Scientific American.*

Chinese Method of Preserving Grapes.—Travellers inform us that the Chinese have a method of preserving grapes, so as to have them at their command during the entire year; and a recent author gives us the following account of the method adopted: It consists in cutting a circular piece out of a ripe pumpkin, or gourd, making an aperture large enough to admit the hand. The interior is then completely cleaned out, the ripe grapes are placed inside, and the cover replaced and pressed in firmly. The pumpkins are then kept in a cool place, and the grapes will be found to retain their freshness for a very long time. We are told that a very careful selection must be made of the pumpkin, the common field pumpkin, however, being well adapted for the purpose in question.—*Report Depart. Agriculture.*

Garden Work for July.

The work in the Garden for this month is as follows:

Preparation of Cabbage Beds.—Beds for cabbage should be liberally manured, deeply spaded and well pulverized. The raking should follow the spading as fast as the ground is dug over.

Setting out Plants.—Choose if possible a cloudy day, or a soft rain, and set out cabbage plants in rows three feet apart and two feet and a half in the row. During all the growing period when dry weather sets in, water every other day after sunset. The best cabbage for winter use are Drumheads. Flat Dutch and Savoys—the latter being the best of all.

Early Turnips.—Prepare a bed for early turnips to be seeded toward the close of the month. For further suggestions see Farm Work.

Ruta Bagas.—If these have not already been seeded they should be gotten in before the middle of the month. The preparation of the soil and the mode of culture are precisely the same as for the winter turnip.

Lettuce.—Set out plants to mature and sow more seed for later crop.

Melons, Canteleupes, Cymblins and Cucumbers.—See that these are kept well hoed. Suffer no weeds among them, and water freely after sunset in dry weather.

Mangoes.—By the 10th of the month plant a bed of melons for mangoes.

Cucumbers for Pickles.—Towards the close of the month prepare a bed and seed cucumbers for pickling.

Bunch Beans.—Plant a few rows of bunch beans every ten days for crops to come in successively. Choose now the coolest part of the garden, and water the plants whilst growing liberally.

Endives.—Set out plants already large enough and sow more seed for a later crop.

Cauliflower Broccoli.—Set out cauliflower and broccoli for fall and winter use. Choose for this purpose a cloudy or damp day, as they suffer much from transplanting in hot or dry weather—when planted water freely, during periods of drought.

Celery.—Plant out celery plants for fall and winter crops.

Pot and Medicinal Herbs.—Gaither in dry weather. Dry them under cover, and when this is done label each parcel and store it carefully away until wanted.

Garden Peas.—Choose a shady border, and plant a few rows of peas early in the month for late use.

The best evidence of a man's success in business, is the fact that he is always kept busy.

NOTES AND COMMENTARIES.

BY PATUXENT PLANTER.

Immigration.

At this time there is no question of more vital importance for the consideration of the people of Maryland and the whole tier of border and Southern States, than that of immigration. Our people are apt to be too narrow-minded on great questions, which seem to particularly concern only one class of people. On all subjects connected with internal improvements and enterprises of a general character—public institutions for charity, colleges, &c., they are very liberal and heretofore have too freely and lavishly expended the public money and credit. The treasury has become depleted, and the State involved in a large debt, requiring heavy taxes to be imposed, hence, our people hesitate to sanction any project which requires the money or credit of the State to carry it out. This is particularly so, when the enterprise may be characterized by party politicians "as class legislation." In this fact we find the opposition to the demand for any aid on the part of the State toward immigration.

To fully argue this subject would take up too much space in your valuable columns at one time, yet to the farmer especially and to *every* body, it is a matter of infinite importance, and therefore, I feel no apology is necessary, in concisely and tersely offering a few suggestions, which have occured to my mind after a perusal of the proceedings of the immigrant and labor convention. And here I would remark, that such a convention should be held often until the great work it has in hand is either accomplished or abandoned. It will leave its mark for good or evil upon the destinies of the State. By this convention being called often, it keeps up the agitation of the question and new light is thrown each time upon the matter by social converse, public discussion and the attrition of practical minds from all parts of the State and representing the views of all classes.

First, the public are to be disabused of the error that many labor under that it is a *class* only of our people who will be benefitted by immigration, the land oweners and such as want hired labor. The farmer it is true will be primarily the party most benefitted, but it will to a corresponding extent ultimately be aiding the merchant, mechanic, manufacturer, and man of wealth and ever leisure. This is too clear for argument to any one who will give it serious reflection. A large immigration would reduce taxes, strengthen the State in her resources of every sort, as well as in her pecuniary affairs, military strength and political power. A liberal aid on the part of the State, under a judicious system, managed by individuals and not State officials, disrobed of all party control, would, with private contributing, bring to us in the next decade substantial voters enough to entitle us to another representative in Congress, and add to our monied capital in coin a million, beside the increase in the value of property, which would flow necessarily from such an influx of population, much of which would no doubt be either from their arrival or soon after, purchasers of land or personal property.

It is not common, ignorant, poverty-stricken labor we want, but intelligent, honest industrious laborers; nor that class alone, but thrifty-farmers and artizans; men with some means, to buy and stock and build upon 10 to 100 acres of land. This can be done easily with a fund sufficient to pay good agents to set forth the thousand advantages offered by the former slave-border States over the north and west. Our lands can be shown to be cheaper than any land now in the markets of the great west; cheaper than government lands, if cost of building, fencing, clearing, distance from market, mill, school, church, medical attendance in case of sickness, &c., be taken into consideration. Those likely to come here are people who have been crowded and hedged in by their neighbors all their lives. They would never prefer as their home, the wilderness where they could not see the smoke of the next neighbor's chimney, if they were well satisfied from reliable sources, that they could get as cheap land two thousand miles nearer their father land, and be in a fertile region, where they could hear their neighbor's gander cackle and his watch dog's bark, be near the church of their persuasion; convenient to a mill, store, post office, school, shops for repair of farming utensils, &c., and close to a railroad or turnpike or water navigation, by which to send their produce to market, with that market in easy reach, not hundreds of miles away. All these important facts should be pressed upon the people of the old world in their own language. To do this it will require more than $10,000 or $50,000 to make such impressions in the different countries of Europe, as would induce a large number of people to emigrate to Maryland and Virginia. The Western States and the railroad companies have got the start of us, and it will cost us time and money to set ourselves and our lands in a favorable light before them.

Individuals can now obtain what sort of labor they may want through the agency in New York, long established, by paying $5 or $10 to the agency and advancing half the passage money of the employee.

I believe that the sum of $500 for each county cannot be raised by individual subscription, and

when raised, if it can be done, will in the aggregate be too small to effect any thing of importance.

I do not object to county associations; I think it wise to have them, and all the money that can be obtained through their influence will but help the cause and lessen the possibility of loss on the part of the State. Yet I cannot see if the State was never repaid a dollar directly, it would be the loser if the population was increased with 5000 intelligent, honest, worthy people, each year. Indirectly the State would be gainer, each year, more than the year before. This importation of human bone and muscle would be far more remunerative investment for Maryland than her canal, bank or railroad stocks. This investment would be for the benefit of the whole people of the State, and not for a particular section, or class of people, nor for cliques or corporations. Any reasonable expenditure which will increase population, furnish labor, add to the products and foster agriculture to a greater degree than at present, would be wise and must in a corresponding degree remunerate the commonwealth and increase the prosperity of all its citizens. I would ask, are we not putting the cart before the horse, or trying to catch birds before we have provided cages? If we succeed in getting them, will they not fly off before we can secure the cages, and when gone off with the song, that they were caught, but, there was no cage or nest provided, and therefore had to leave, it will be hard to catch any more. We ought to set about providing comfortable houses and have our lands mapped and described truly, that all may be ready for their reception when they do come whether as laborers, tenants or land buyers. In furtherance of this, county associations will be of the greatest use and importance.

Members of these associations, and persons in a neighborhood, should confer together and determine how many and what sort of labor they want; make proper provision for them, and determine upon the wages or terms they would be willing to give, and then an agent in Europe would no doubt be at once able to secure a suitable set to fill the order. If a dozen families are wanted on farms, they would be more likely to be obtained than a single man, or a single woman. This is natural and reasonable. We have every element in soil, climate, diversity of employments, locality, &c., to induce immigration to this State over most of our sister States, except Virginia, and in some respects, over her, and all we want is union of sentiment and energy, harmony and liberality among our own people, with the fostering care of the State, to insure the tide of emigrants being turned toward Baltimore, and flow over the whole State.

The Season.

In Prince George's we have had a remarkable drought for this time of the year (15th of June) from 14th of May to 8th inst. and I learn it extended over a large portion of the State. Wheat did not suffer, and is one of the best crops we have made for years. A great deal of rust on the blades but none to injure the grain. Red wheat free from rust. Corn looks very fine. Grass and gardens looked as they often do in a dry August. Tobacco plants were destroyed by the thousands, but the fine rain of 8th inst. has restored all that survived and much tobacco was planted. The crop will not be as short as was expected. The hay crop must be a very light one, therefore I would suggest that our farmers sow a few acres in millet and broadcast corn. Both require rich land and thorough preparation, with thick sowing. If these pre-requisites are attended to in time, each will give a heavy yield of provender of the nicest and most nutritious kind for milch cows and young stock. Attention to this will more than compensate for the deficiency of the hay crop, and perhaps be an inducement hereafter to add yearly these or one of them to the stock of long food, because all who have tried either admit it to be a valuable adjunct to the store of provender. Some years ago I made an old steer very fat without grain, by feeding him from 1½ to 2 bushels of Ruta Baga cut fine, seasoned with salt, and all the millet, nicely cured, that he would eat.

Domestic Industries.

Allow me a word to your lady-readers if any of them do me the honor to read my humble lucubrations. This is the month for making currant wine, and shrub, cherry brandy, cherry bounce, and Blackberry wine. Also to can or preserve currants, gooseberries, raspberries, &c., and no house-wife in the country will neglect to put up a large supply of all, if she reflects upon the pleasure it will afford her the coming winter to witness the grateful looks that will be turned upon her by a loving husband, children and friends, as they enjoy the fruits of her summer's thoughtful care and irksome toil. Let her remember this and her work will be a labor of love, and the delicacies will be all the sweeter for the thought. I append a recipe given me by a valued lady friend, whose wine I think better than any I ever drank, that was vouched to come from Portugal as old Port.

Blackberry Wine.

To each gallon of fruit 1 quart of boiling water, mash, strain, and to each gallon of liquor add 3 lbs. of sugar. Fill not quite full the demijohn, keg or barrel, cork or bung lightly for a few days, then stop up tight. Next March, some clear dry day, draw off all that runs clear, bottle or put in small demijohns, and each year it will improve, though it is very drinkable at once.

ALL ABOUT HARROWS.

To the Editors of the Maryland Farmer:

With the exception of framing there has scarcely been an improvement on the harrow since the origin of that important implement. The common perpendicular spike tooth is evidently doomed by the recent action of American genius. I would notice the following:

COMMON HARROWS.

The Scotch or English hinge harrow with four bulls on a side, and the double angular or Geddes hinge harrow are the best constructed implements of the kind, in my estimation, that are now manufactured, mainly because they are more easily relieved when choked, as it is termed, than the common drag. For covering broadcasted grain, grass seed and the manures, the common spike harrow does the work imperfectly, and with the exception of framing they possess no merit.

THOMAS' PATENT HARROW.

Thomas', or the smoothing harrow, being one of the latest inventions, I would notice it. I have before me Thomas & Co.'s (Geneva, N. Y.) circular, showing a figure of the implement, description, etc.

I think Mr. T. can safely claim all that is said in its favor. The only novelty, however, that I can discover is that the teeth incline back instead of being set perpendicular. Any one could have done that, says Jones, but the question is why so simple an improvement has not been conceived ere this? Under the harrow class 'tis quite unique. T. & Co. say the teeth are steel. I would ask what kind of steel? If common steel, well tempered Swedes iron would do as well, be as durable, and cost less.

The holes in the beams, or bulls as they are called, are bored on an incline, and the spikes or teeth "driven home." I would extend the head of the spikes 1 or 2 inches above the bulls, to allow them being driven down as the points wear off.

By plugging up the holes of the old style harrows, boring incline holes, and attaching our old teeth, we have the smoothing harrow to a nicety. But mind you, Mr. Thomas will, of course, claim a fee for the privilege.

Thomas' harrow is made with three frames, four bulls to each; the wings hinged to the centre frame. I would suggest that Mr. T. adopt instead either or both of the harrow frames above alluded to, he would then unite with his spike improvement the best hinge principle known; his harrow is a combination between the hinge and common drag harrow; the centre frame I consider superfluous and creating unnecessary cost. By making the frames with five bulls instead of four, or widening the Geddes frame about twenty inches, Mr. T. would clear about as much space as with his harrow as now constructed. I will suggest to Mr. Thomas privately another and more important improvement on his harrow, (if he wishes me to do so,) which I am confident will enhance its value upwards of 50 per cent. and render it more of a novelty.

SHEAR'S CULTIVATING HARROW.

The manner of construction of this valuable implement appears to render it unfit for any farm work except covering broadcasted cereals and manures, for which it is admirably adapted; as a cultivator the width is too great for it to pass through any crop. As regards harrowing, I cannot see where the merit lies. Its chief defect is that the castings are in one piece instead of having movable sole pieces and shears; when these castings wear dull they have to be renewed at a serious cost, on the contrary, new sole pieces and shears could be attached for a mere trifle. The defect must and I am sure will be overcome.

COMBINED HARROW AND ROLLER.

The combined harrow is but little known or used except where heavy tenacious clay lands abound, and inclined to clod. They are made with heavy timbers, form angular, with a wooden roller attached in the rear at regular distances apart, in the frame are attached sabre cutters, the edges or points turned back about 35 degrees; in the roller are similar cutters, arranged to strike between those in the frame; they cut up large clods completely, and leave the plowed land well pulverized and as smooth as a floor. The roller is supported by two stud pins resting in boxes on top and rear of the frame, and the sabres in the roller are about five inches longer than those in the frame. In such lands Thomas might contest successfully for the palm by making his harrow extra heavy, strong and adopting the improvement that I am willing to suggest.

As regards prices those gentlemen may think proper to charge for their wares 'tis no business of mine to dictate. I would only say, by charging a fair advance on prime cost the annual profit will be greater than by adding an exorbitant percentage, or, as the Scotch have it, "turn a penny often you realize a pund."

PLOWMAN.

WATERING PLANTS.—Violet, in the *Maine Farmer*, says: I have kept window plants for a dozen years or more, I have always watered them with well water, and have always had good success with them. I have roses, carnations, heliotropes, geraniums, maple-bell, calla lily, verbenas and many others.—The verbenas I grow in glass tumblers, and keep them very wet. My maple bell I have kept in a pot that would hold about three quarts of earth, and have kept that very wet too. I have not changed the earth since last fall. The flower buds of the verbena and maple bell blight if they are not kept very wet. I never fail of having all my plants flower nicely through the winter.

For the Maryland Farmer.

THE TRIALS OF HORTICULTURE.

Eternal vigilance is the price of all good success in horticulture. The planter whose crops cover an area, often, of hundreds of acres, may not visit every part of his fields "once a moon." It is not to be expected, and is not particularly desirable. *His* crops are of a tough and hardy nature, the prey of comparatively few enemies. But not so with the gardener. The man who does not give his garden daily, and almost hourly attention, need look for no very striking or profitable results. The experiences of the present season have forcibly impressed this fact upon us.

Early in the spring I had some rows of garden peas that promised to be extra fine. With care I nursed and wed them, but the hares came at night and eat them down. My cabbage and beet plants too seemed to be particular favorites with the hares. This was very provoking, and my patience, not remarkably great, soon gave way. I put a query in the *Country Gentleman*, asking for a remedy. I was told about blood, &c. Now I had no animals to kill at that time; so I made use of the only *sure* remedy within my reach at that time. I made my garden too tight to admit the entrance of the hares. I am convinced that sitting up one night, and treating the dishonest rogues to a little gunpowder, would have had the effect of driving them away.

Next, some cabbage plants, which I noticed one day as nearly large enough to put out; but ere another day had passed, the "flee bug" was honeycombing them at a fearful rate. I waited till morning when the dew was on, and sprinkled soot freely over them. This drove them off till the next rain. Then I had to repeat the dose. Soot, besides being a good fertilizer, will keep off the "flea bug" if repeated every two or three days; and everybody has soot.

Next thing, the cut worm took to some newly set cabbage. I placed about a tablespoonful of salt around each plant. No more cut worm, and the cabbage seemed stimulated.

One day I discovered some signs of club root, and also that some cabbage leaves seemed to be curling up. The latter, I found, was caused by a small insect. I took all the clubs and curled leaves that I could find, and burnt them.

The next mishap that I shall mention here: a small and pretty bird destroyed the whole of some favorite turnip seed. It was a yellow bird, with markings of black. The Baltimore Oriole (?) perhaps.

Having received some cucumber seed of an excellent variety from a friend, I took extra pains in making a bed for them. They came up well, and appeared to be very thrifty. Lately I discovered that they were falling a prey to some unseen enemy. I began to look about for them. They were found hid away under the clods near the vines. It was the stripped or cucumber bug, which feeds mostly at night, and hides away, under anything near the vines, at the approach of day. I killed all I could find with thumb and finger, and placed the clods for them to shelter under again. I think I have caught Mr. Cucumber Bug.

A tree of fine, nice May-duke cherries, just beginning to ripen a week or two ago. It seemed to be the favorite resort of a number of cat birds. I soon found that the cherries were what the birds were after, and that, if let alone, there would soon be no cherries left for myself. What was to be done! Thinking of what I might have done for the hares, if I had kept a gun, and resolved that I would save a few cherries at all risks, I borrowed a gun, and soon placed two or three of the impudent fellows *hors de combat*. The rest were frightened away, and *my* family, and not Mr. Catbirds, have enjoyed the cherries. So much for prompt action. Now I am a great friend of the birds, and do not like to see them destroyed wantonly, but I *can't* stand the cat birds when they are pillaging my strawberries or cherries.

Such are some of the trials of horticulture that the followers of this delghtful vocation every year experience. It will be seen that in all cases prompt action of some sort is the remedy. The good gardener, like the skillful general, must ever be on the alert. *Daily* inspection of *every growing plant* is not too much. We hope to be able, the coming season, to give the whole of our attention to our favorite calling; and if spared, will give the public the result of our experience. B. W. J.

Cottage Home, Surry, Va.

Butter Making.—A correspondent of the *American Agriculturist* writes as follows:

When the milk is brought in and strained, set the pans, one at a time, over a kettle half full of boiling water, and let them remain until the milk is thoroughly scalded; this is to be repeated the next day, and the milk then set aside in the pantry adjoining the sitting-room or kitchen, and kept comfortably warm until fit to skim; the cream is to be kept in loosely-covered jars, in the same temperature, and well stirred every time fresh cream is added, and churned at least once a week; the butter will be as sweet, and almost as rich as in June or October. If an orange carrot be grated fine, a little warm water poured on it, and the juice pressed out, strained and stirred in the cream before churning, the butter will be of a beautiful golden yellow.

Always speak the truth.

For the Maryland Farmer.

FORCING MUSHROOMS.---NO. 3.

From the time of covering with earth the room or shed should be kept at 60 or 65 degress, and the light must be excluded ; if the heat be suffered to exceed to any considerable degree it will cause the beds to ferment a second time, and weaken, if not totally destroy, the spawn. But should a much lower degree of temperature than the one prescribed be permitted to prevail, the mushrooms will advance slowly in their growth, and if watered in that state numbers of the small ones will be prevented from attaining perfection. In watering them extreme caution is necessary as well in the mode of application, as in temperature of the water, which should be nearly as warm as new milk, and very lightly sprinkled with a syringe or small watering pot ; if cold water be used and given plentifully at one time, it will not only destroy the existing crop, but the spawn also, and render the bed so treated of no farther utility. If the beds have been suffered to become very dry, it is better to give them several light waterings than one heavy supply. In gathering the mushrooms great care must be taken not to disturb the small ones, which, with good management, surround the stems of those that are more early matured. The best method is to twist them up very gently in all instances where you can, but where you are obliged to cut them, care should be taken to divest the bed of the stems of those which are cut, as they would rot, to the great injury of those that surround them. If the preceding directions be properly attended to in the management of the beds, they will continue to bear for several months. When the beds are in full bearing, if the mushrooms become long in their stems and weak, it is certain that the temperature is too high, consequently air must be admitted in proportion to the heat. W. Lineker, *Practical Gardener.*

Forest Leaves.—Forest leaves are invaluable to every gardener and horticulturist. They act not only as a mulch for growing plants, but are capital for incorporation in the manure heap. If decomposed by themselves, they form a natural mould, admirably adapted for the successful culture of flowering plants in pots. All our florists are glad to get wood mould. The question has been asked as to their manurial value. The answer has never been fully satisfactory. Owing to their bulk, they are not as valuable, in proportion to time occupied in gathering, as if the same time had been spent in carting muck. But, for the successful propagation of plants in green-houses, decomposed leaves are always worth the trouble to secure.

Make few promises.

PREVENTION OF RUST IN COTTON.

Dr. E. M. Pendleton, of Sparta, Ga., writing for the *Banner of the South*, on the above subject, speaks as follows :

Our plan is to make humus, prevent rust, and still gather a remunerative crop every year from the same land, is as follows. Take a field, for instance, that has been well worn by repeated crops of cotton and cereals, but still with some productive capacity. We plant in cotton, applying a good nitro-phosphate, at the rate of two hundred to three hundred pounds per acre. It makes a very good crop, but shows unmistakable evidence of rust. We gather the cotton, and put down in oats, any time from November to February, broadcasting with cotton seed as many as we have to spare, and plowing in oats and cotton seed together with a turning shovel. The heat produced by the fermentation of the cotton seed keeps the ground warm and protects the oats, while in the sprout, from being killed by the freezes. A good crop of oats is assured, and the nitrogen of the cotton seed, not exhausted, is spent upon a fine coating of grass and weeds which, together with the oat stubble, forms a first-rate supply of organic matter for cotton the next year. The land lies in stubble for fifteen months without being disturbed by the plow, equal to one year's rest, and then comes the nitro-phosphate with cotton again. A better yield is the result, with less, if any at all, and the cotton seed and oats again, (or wheat) may be repeated, and followed by the cotton without fear of rust, because the land is kept supplied with humus by a rotation of crops.

I would not recommend this rotation for every field in the farm, but only those which would seem to require just such treatment. Poorer fields might be allowed to rest until brought in better heart, while those recently cleared should be pushed in cotton and corn for four or five years, until the humus had been partially exhausted, and a rotation becomes necessary. If there are no new grounds a judicious system of rotation might be instituted between corn, small grain and cotton, which would keep the lands from rusting, by ensuring a supply of humus. When lands are plentiful, one year's rest might be allowed with good results. Such a system established and carried out would soon drive the rust from our farms, and cause our denuded hills and barren fields "to blossom like the rose."

A correspondent of the *Country Gentleman* says : The first milking of a cow that has just dropped her calf, and new buttermilk, should never be fed to swine, but should be poured into a swill barrel and diluted ; then no bad effects would be likely to arise.

AGRICULTURAL CHEMISTRY.---IX.

BY J. S. H. BARTLETT, M. D.

THE VALUE OF PHOSPHATES IN AGRICULTURE.

The interesting digest on the subject of Native Phosphate in the February number of this journal, opens a matter with the nature of which those who use commercial manures should be acquainted. It is natural when viewing agriculture in the important light which it deserves, that any source by which this branch of industry can be promoted should be received with welcome. Every means of fertilizing the soil and increasing its productions should be duly appreciated, and turned to the best account. It is also at the same time advisable to entertain any arguments, and to bear in mind any facts, which knowledge and experience may seem to justify with regard to the comparative value of different fertilizers.

The apatite (mineral phosphate of lime,) which, according to Mr. Gordon Broome, of the Geological Survey of Canada, exists there in great abundance, we may presume bears a close analogy to the apatite found in New York and New Jersey, as well as in some parts of Europe. All these analyze well, as compared with bone phosphate of lime but in their effects when applied to the soil, possess a widely marked difference from those produced by this latter material. If we mistake not, the late Jas. J. Mapes was the first one in this country who advocated the theory of the "progression of primaries" in the matter of manures. To-wit: "that the value of a manure could not be calculated by the separate elements or primaries it contained, as shown by analysis, but that each primary as it assumed *proximate conditions* in organic life, possessed *new functions* not common to the primaries in the lower scale in nature. That potash, as found in the feldsparrock, was not in a condition to feed the higher class of plants, as would the potash made from ashes of the oak or hickory. That limestone, though of the same chemical composition as the English chalk, differed entirely from it in functions, that 2 per cent. of carbonate of lime, (though effete) made by burning lime stone, would if added to soils to the depth of usual cultivation would render such soils barren; still some chalk soils in England contain nearly half their weight of carbonate of lime and were fertile The chalks, however, were *progressed*, by having been many times in organic life before they assumed their present forms. That phosphatic rocks (apatite) although they contain 95 per cent. of phosphate of lime, if heated to redness and then ground, had no value as manure for the higher class of plants, while the phosphates of lime resulting from heating bones of animals to redness and then grinding them, furnished a phosphate of high value. That super-phosphates made by treating both these with sulphuric acid, differed from each other essentially in value, the one being readily absorbed by plants, and the other refused altogether except by plants of the lowest order, as lichens, mosses, &c. That all the primaries in nature as shown by analysis were subject to the same laws, and that each time they entered into organic life, they were progressed as compared with their former status, and suited thereby as pabulum for more progressed organisms. That, while analysis might be used to discover the existence of primaries in any substance, it could take no cognizance of *condition*, *improved function*, or *progression*.

Let us now look at authorities from other quarters which have a bearing on the subject. As far back as 1862, Prof. Voelcker, chemist to the Royal Agricultural Society of England, seemed to have arrived at conclusions similar to those embraced in the theory of "progression of primaries;" as will appear from an extract from an article of his published in "*Bell's Weekly Messenger*" at that time.

Speaking of commercial manures, he says: "I have abstained for some years past to put a precise money value upon manures that may be sent to me for analysis, because I feel assured that the calculations made by chemists and others, according to the published price lists of fertilizing constituents, do not further the true interests of the farmer. I know from experience, that manures can be, and are manufactured, which give better analytical results and a higher calculated money value, than others, which nevertheless are really more valuable than the former. Although the latter give a much more favorable result in the field, and cost the makers more money than the former, they do not, as the saying is amongst dealers, "analyze so well." Chemical analysis is no doubt one of the most important and reliable means for estimating the value of artificial manures, but it is not the only one, for no analysis, however refined, furnishes all the data for arriving at anything like a correct estimate of the value of a manure."

It is here fully explained that the practical value of a manure depends not merely on the elements it contains, but is very importantly affected by the condition in which they are present in the compound, and are thus made more or less readily available to the growing plant. That the effective use of a fertilizer in the soil cannot be determined by a mere statement of the market value of its individual constituents. In other words, if a manure contains a large percentage of phosphate, consequently causing it apparently to possess a high value, its effects on the soil will materially depend on the fact, whether that phosphate be of mineral,

or organic origin, for a less percentage of it if organic (bone) will be more effective on the growing plant than a much larger per cent. if of mineral (apatite) origin. This may be accounted for by the greater insolubility of the mineral, and supposing it were rendered soluble, by the alleged disinclination on the part of the higher order of vegetation for this kind of nourishment.

We are aware from our own experience in agriculture, of the greater activity of lime applied to the soils when made from shells, than when made from limestone. In the former case the lime has been made from a material of organic origin, in the latter from one of a mineral origin, the mineral lime in some instances, not showing any decided effects until the second or third year after its application, and then caused chiefly by some chemical change produced by it in the soil. In medicine, also, when phosphate is to be administered, the effect of that prepared from bone is said to be of a more decided character than that from mineral origin. It is supererogatory to animadvert upon the Canadian mineral super-phosphate, of which we know nothing except theoretically, we understand however, that some of it has found it way into this market, which we hope will be tried in different ways, and on various crops, in order to test its properties. But we should decidedly object to this or any similar material of minor value being used by dealers or manufacturers, (as is frequently done in Europe) as a means whereby to adulterate pure bone phosphate, lest it should result in farmers losing confidence in the dealer, as well as faith in commercial manures. In a report of the Secretary of the French Academy of Sciences, it is stated, "M. Moride, who, with M. Bobierre, has rendered great services to agriculture, by analyzing manures and exposing certain frauds in commercial fertilizers, has proved by direct experiment, the insolubility of many mineral phosphates in the state in which they are offered to agriculturists; and has pointed out the means of detecting the mineral phosphates, mixed, whether it be with organic matters, or with bone black of the refineries. For this purpose he recommends particularly the employment of acetic acid in a boiling state, which attacks and dissolves these last, while it leaves the other intact, and the incineration of which yields with the phosphate of bones, or bone-black *white ashes*, while the mineral phosphates produce *red* or *brown ashes*."

Prof. Voelcker, of the Royal Agricultural Society, in comparing the value of a super-phosphate made from bones with that made from petrified, or mineral phosphate, says: In the case of bone dust, it does not matter if the whole of the bone earth is not rendered soluble, bones even partially acted upon by sulphuric acid, become sufficiently soluble in the soil to prove efficacious. But the case is different if mineral phosphates, such as apatite (mineral phosphate) or coprolite (petrified phosphate) powder are employed in the manufacture of super-phosphates.

Further testimony could be adduced in relation to this matter if it were thought necessary, but we think enough has been advanced to give our readers a sufficient idea of the subject.

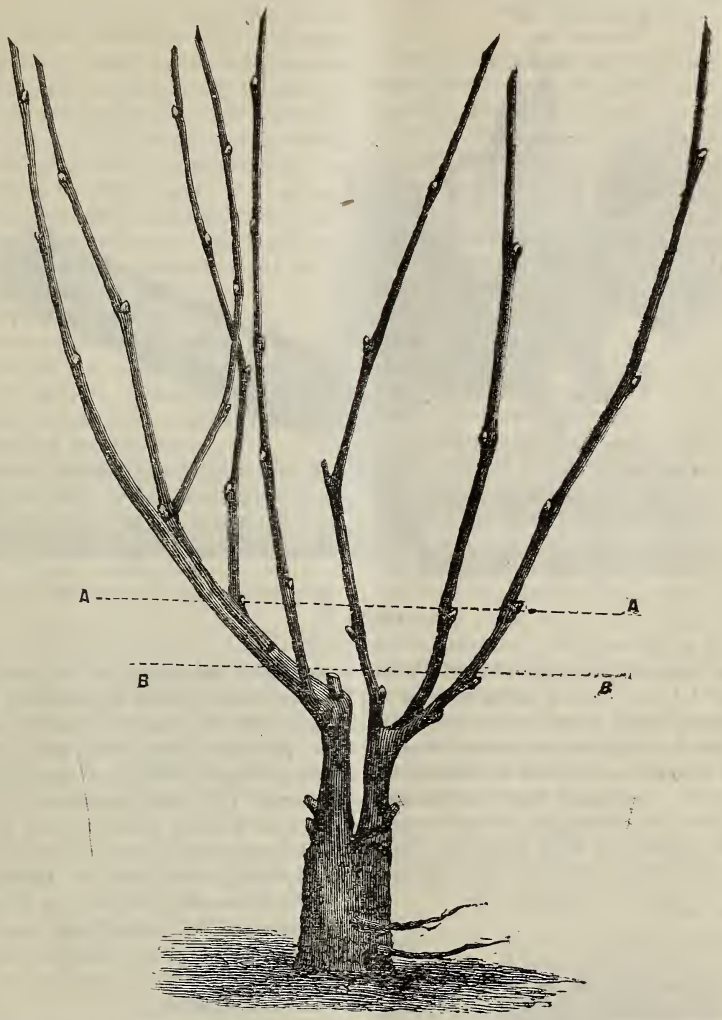
The remarkable deposits known as the "Charleston Phosphates" may be considered a source of national wealth in the hands of private individuals. A description of this subject, of general, as well as local interest, can be found in the former numbers of the *Rural Carclinian*, a valuable agricultural magazine. The area of the great bed in which are found the phosphate rocks or nodules, mixed with the bones of extinct as also of extant races of animals is estimated by some at thirty square miles, and the specimens of these bones and nodules are extremely suggestive of inquiry as to the time and circumstances under which they were desposited. The yield of these is from 500 to 1,000 tons per acre, which would give twenty millions as the probable yield of the whole bed. The material is not a mineral phosphate, but in its crude state when ground fine, is considered equal in fertilizing power to calcined bone, besides containing nearly 7 per cent. of nitrogenous organic matter, equivalent to at least one half per cent. of ammonia."

According to the Charleston *Daily News* the vast amount of valuable deposits lying a few feet below the surface, along the Great Carolina Marl Bed, have over six millions of capital and crowds of energetic men from the North, and attacted the attention of *savans* in all quarters of the globe. The average thickness of the strata of deposits is from fifteen to eighteen inches, and the crude phosphate commands from $6 to $7 per ton in the market, thus bringing up the average value of the whole deposit to one hundred and thirty millions of dollars.

With such advantages in aid of its agriculture, and under a reliable system of labor, it would not be difficult to foreshadow the future for the Palmetto State; and we can venture to predict for her the reputation of being one of the brightest stars in the galaxy composing the Federal Union."

Repelling Insects.—For repelling insects, the *Gardener's Chronicle* recommends a dry mixture of four parts of road dust, two parts of powdered tobacco, of any kind, and one of sulphur—to be dusted by hand over the plants, after sprinkling them with water.

No Fragrance, Fruit or Song.—The rose of Florida, the most beautiful of flowers, emits no fragrance; the bird of Paradise, the most beautiful of birds, gives no song; the cypress of Greece, the finest of trees, yields no fruit.



WAGENER'S METHOD OF GRAFTING.

We here present an illustration of a vine as a sample from a vineyard of one and one-fourth acres, which was grafted by this method to Ionas, early in the month of June last. The vineyard was originally set to Catawbas in the spring of 1854, four feet between the hills. Each alternate vine was grafted, leaving one old Catawba vine between each grafted hill to bear, which it did, bearing three tons of well ripened Catawbas to the acre last fall. The vine shown above was grafted on the 7th day of June, and made forty feet of well ripened wood while several made over eighty and over one hundred feet of good wood as well ripened as though it grew on its own stock, and bids fair to bring a fine crop of Ionas next season. Mr. WAGENER grafted from early spring until late June with equal success, but the early grafted made better growths, and perfected its wood earlier. He consequently recommends early grafting.

We give also an illustration of a stalk with three cions inserted, showing how the work is done—Fig. 2. The stock should be sawed off a little below ground, and after the cion is set, the whole should be slightly covered with earth and mulched with saw dust.

DESCRIPTION OF TOOLS.

No. three is a representation of the implements with which the work is done. A double saw for cutting the kerf with which a portion of the stock is removed instead of splitting in the old manner.

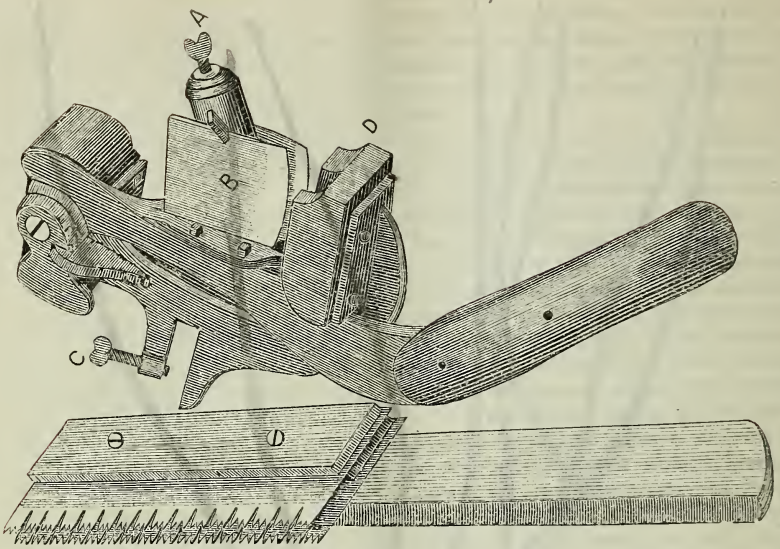


FIGURE 3.

A double bladed cutting knife with which the cion is brought to any desired thickness so as to exactly fit the kerf made in the stock, completes the set of implements with which the work is done by the Wagener method. A.—Thumb screw for tightening the knives. C —Thumb screw for fastening machine to table. B.—Knives for cutting the cion. D.—Block for holding cion while being cut. These instruments are exceedingly simple, easily adjustable, and can be worked by a mere novice.

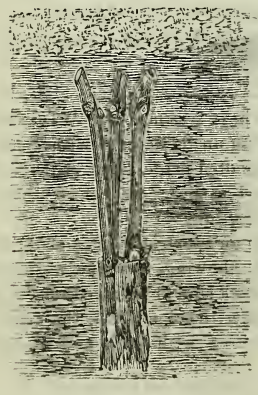


FIGURE 2.

Neither skill or experience is necessary in order to ensure success, for the kerf being made by a machine, is perfect of equal and uniform size, while the cion is fitted by another implement that will ensure a good joint and success follows from necessity. The wood of the grape is so constituted that it does not split with any kind of uniformity, and the cion is soft, porus and pithy, so that with the old system of cleft grafting a double cause operated to prevent its success. With these implements the entire fruit of a vineyard can be changed to any more desired variety without the loss of a single crop and with little expense, or outlay of labor. Grafting done by this method ensures not only success, but an amount of young wood that prompises an immediate crop of grapes from the grafts. One can scarely imagine the amount of benefit this system is likely to be to the vinegrowing world.

The interest our several wine companies take in this method is very great, as being an aid in bringing speedly into bearing the more valued varieties. They are extremely anxious to be able to get Iona and Walter grapes to mix with their wines. It gives a particular point and flavor to wine, rendering it much more desirable, and goes far toward winning favor when compared with the fine foreign wines with which they are now daily brought into competition.

It is an advance step in vine culture that will go far toward annihilating the heretofore fabulous prices at which new and choice grape roots have been sold. We are most truly a favored people.

As the forest and timber lands have given place to the hand of cultivation, and wood becomes scarce and high rendering it impossible to furnish our

many fast growing cities with fuel, the coal fields yield up their mine of wealth to warm and gladen the poor. When the whale (our only reliable source of oil) became scarce and shy, so that the thoughtful and provident began to feel a deep concern for our future supply, the exploring auger finds its way to the regions below, and a voluntary flow came forth, furnishing most abundantly, the means of light to such as grouped in darkness. And now, when some fatal malady attacks a special variety of grape, another more hardy or less afflicted is brought to take its place almost by magic.

This is truly a progressive age. Our wants (which are many and varied) no sooner become known than means are brought into requisition to supply them, means which, until then, lie hidden far away in the inventive mind of some self-sacrificing Yankee that has been plodding the weary road of life, without himself knowing the march of progress that throbbed through his active brain, and finally bursts in a flood of blessing in this most oportune and timely way.— *Pleasant Valley Fruit and Wine Reporter.*

DIRECTIONS FOR CULTIVATING SORGHUM.

By experiment it has been ascertained that sandy soil is the best for sorghum and that the best kind of sorghum to make molasses is the black top, although the white or grey top grains or turns more to sugar. Plow about the depth you would for corn when plowing for sorghum, and if the ground is lumpy, harrow it well before furrowing or laying it off. Drop the seed in hills in the furrows, about four or five seed in a hill and no more. Hills are better than drills. Then cover your seeds with a hoe if your patch is not too large. If it is large, a plough will do the work if the ground was well harrowed. If the season is dry, cover deep; if not, not so deep. If you dropped more than the specified number of seed in a hill, when the sprouts are up thin them out. A very good plan is to hoe sorghum before plowing while it is small. When the stalks are large if there are any sprouts on them break them off. When the tops are dark or black the stalks are ready to strip. Be sure to take off the dry leaves and their hulls when stripping, and when cutting, cut above *all roots*, as the juice in them injures the molasses. Above, or a little below the second joint is the best place to cut if it has been blown down long. When topping, cut below the last joint; remembering that the better you strip, cut and top your cane the better molasses you will have. I have found it advantageous to let it stand a week or ten days before cutting, after stripping. And if it has to lay in the yard at the mill a few weeks before it is made up or ground, don't think it is spoiling, for it is not. When unloading lay your cane on the pile straight, for it will be a credit, as well as an advantage to you. The above directions are practical as advantageous.— *Cor. American Farm Journal.*

The Ruta Baga Crop.

Some of our best farmers annually put in an acre or two of ruta bagas, and thus lay up for winter a supply of good succulent food that comes into use when they are obliged in a great measure to depend upon dry food only. When the bagas are chopped up and sprinkled with a little corn meal or bran they are eaten eagerly by cows and steers, and are not only fattening and milk-producing, but extremely wholesome. They are raised as easily as a crop of ordinary turnips in drills. The ground must be well prepared and manured deeply, the rows struck about thirty inches apart, and the seed drilled in. When up two or three inches the plants should be thinned out, removing the weakest, to four or five inches apart, and thoroughly cleared of weeds. The cultivator should be passed through once or twice carefully. In three or four weeks another thinning out should take place, allowing the plants to stand from eight to ten inches apart. The hoe should be freely used between the plants, and the cultivator between the rows. Frequent stirring of the ground is indispensable in the production of a large crop. They are not removed from the ground before November. We have known eight hundred bushels to be raised to the acre, and have heard of twelve hundred.

The seed should be put in the ground from the 15th of June to the 1st of July. A sod broken up the previous autumn is perhaps the best for this crop.— *Germantown Telegraph.*

Celery.—New Mode of Cultivation.—The old fashioned way of cultivating celery in trenches dug deep with the spade has been abandoned by the market gardeners, and is now considered a useless expense. It is found to do much better grown on the surface, making a quicker and a greater growth, on which the quality so much depends, and the labor of digging the trenches is saved. We hope, therefore, it will be found more easy to grow it, and that it will come into more common use. Celery does best on a deep, rich loam. If the land is not sufficiently rich, apply old and well rotted manure. It may be sown from the 20th of June to the 1st of August, or even later, according to the object in view. Planted about the middle of July, it would be large enough to "blanch" by the middle of October, and be ready for use about the 1st of November. It has always been regarded as an expensive and troublesome plant to raise, but it is a great luxury. —*Mass. Plowman.*

The Cauliflower.—To attain the best success with this delicious vegetable it must have a cool, moist, rich soil. If grown on a dry, sandy loam, to produce good heads the soil must not only be made rich, but the plant mulched, to keep the ground cool, and to retain all the moisture possible.

WHAT AGRICULTURAL COLLEGES SHOULD BE.

FROM ADDRESS OF PRESIDENT WHITE, OF CORNELL UNIVERSITY.

The true schools for the primary, usual instruction in the mechanic arts, and for learning any special trade, are the workshops of the country. They are the most accessible, the most simple. Does a young man really wish to learn to handle a saw, or chisel or plane, these are the practical schools, these are the practical teachers. They are all about him, just where they are wanted, in every hamlet. For that primary work—the learning the usual uses of the usual tools—no other schools can compare with them. Multiply your present endowments by thousands and you cannot supersede the work of these primary industrial schools, almost within a stone's throw of the hearth of every man. If you attempt to do it, you will fritter away your educational resources, and add probably, one poor shop to the millions of good ones.

The same is true of agriculture. For instruction in the simple fundamental processes of farming, the schools are the farm. They are spread all over our country. They are ready to receive all young men who seriously wish primary training in agriculture. Even though the farm be poor, even though the processes be rude, that is the necessary preliminary school. It is accessible; it enables the young man to pay his way; it enables him to get time, if he be thoroughly in earnest, to profit by the common school, the book or the newspaper. Rudimentary instruction as to implements and processes, can be got nowhere so well. None other can supply the demand.

Multiply your endowments for agricultural education by millions, and you cannot meet this demand. You cannot supersede these myriad farm schools in every valley, and on every hillside. Attempt to do it, and you fritter away your endowment, and simply add one poor farm to the myriads of good ones. The same is true in regard to the sciences and useful arts in general. The places for preliminary instruction are the public schools. They too are scattered through our State, almost literally within the sight of every household. Every year the State gives millions to them. Thank God for it. Pardon me for saying that, if there is one thing in my life on which I shall never cease to reflect with gratitude, it is that beneath this roof I have the honor to introduce and report the bills which made these schools free, and which establish the new normal schools to make them effective.

But while thus honoring primary education, I insist that it is folly to waste the special endowments of institutions for advanced instruction in agriculture and mechanic arts in attempting to duplicate or supersede these primary schools. What then, should the colleges for the promotion of agriculture and the mechanic arts attempt to do?

I answer: They should take young men where the farm, the workshop, the common school leave them; young men who have already received a good, sound knowledge and experience in the simple, usual processes of agriculture, and on that they should build, making them master farmers; thoroughly versed in science bearing on agriculture; thoroughly trained in the art bearing on agriculture; trained by studies of nature to use their powers of observation; trained by study of science to use their powers of practical reason; trained by study of both sciences and arts to bring these powers of observation and reasoning to bear on impractical questions. Having learned much of the usual process of farm, they should be made to investigate the new processes to find the facts or fallacies in them. They should be made to study, not merely the plow and plowing, as they could easily study them without stirring from their fathers' farms, but the very best theory and practice of plows and plowing, of enrichment of soils, of drainage of lands, of rotation of crops, of construction of buildings, of breeding of animals, and the like.

With these also should be taught the principles of accounts, so that the student would know, not merely the farming, which a millionaire might play at to deplete his fortune, but the farming which a thrifty settler might work at to increase his fortune. I would let no man graduate until, in addition to thorough examination in pure and applied science, he had gone out on the farm with two experienced agriculturists and had passed a plain, thorough, common-sense examination in practical agriculture, answering their questions how this field was treated, and why; what labor was employed on that field, and with what economic result; what he would recommend for the other field, and why; and so on to the satisfaction of the special committee.

You may by these methods send forth every year a brood of apostles of improved agriculture which shall be better scientifically, practically and economically; apost'es who shall develop agricultural virtues and fight agricultural vices; whose farms shall be centres of new and good ideas; fortresses against quackery. We are not to establish a reform school, nor an intellectual alms-house. We should take sound, manly, capable young men, where the farms, the shops and preliminary schools leave them, and give them back to the country, strong to develop and increase the resources of neighborhoods, States and nations.

☞We are indebted to the *Fruit and Wine Reporter* of Hammondsport, N. Y., for the drawings of "Wagener's Method of Grafting."

The Poultry House.

FOWLS---THEIR GENERAL MANAGEMENT.

There is a great diversity of opinion in regard to the management of fowls, the particular and desirable breeds for all purposes, &c. First of all, their

PROPER CARE AND KEEPING

is essential to success, for a person may have the best known breeds, and if they are not properly cared for they will, in nine cases out of ten, prove a failure. Therefore we wish to impress upon the mind of the breeder, in the outset, that this needs attention more than purity of breed or superiority of kind. As a friend of ours said, "there exists gross neglect of the poor birds generally." This neglect is not confined to persons who have no fancy for fine poultry, but extends even to many who have the reputation of being fowl fanciers. Still, as before stated, for poultry to be remunerative there *must* be good management. In

STARTING OUT IN THE BUSINESS,

plans should be well matured and digested beforehand. A good, convenient poultry house should be properly constructed, sufficiently large to contain the number of birds one desires, warm and dry in the winter, well ventilated, and it should be kept scrupulously clean. The house should not be overcrowded, but just large enough. Nothing is made by over crowding the hennery; on the contrary, it will prove detrimental. The fowls must be fed regularly and at stated periods. They must have plenty of pure water at hand at all times—this is of as much importance to the health of the brood as proper food. If possible, they should also be given, in addition, a plat of grass for a run. Place within the hennery a dust heap; this may consist of wood or coal ashes, sand, or dust from the streets. It should be kept under a cover, so that it will not become drenched with rain or snow, and to it the fowls should have access at all times, to dust, and thereby rid themselves, in a great degree, of the numerous parasites which infest them. The habit of

GIVING TOO MUCH FOOD

to poultry, in a short space of time, is a very bad one. If one notices their habits he will perceive that the process of picking up their food under ordinary, or what we may call the natural condition, is a very slow one. Grain by grain is the meal taken, and with the aggregate no small amount of sand, pebbles, and the like, all of which, passing into the crop, assist digestion greatly. But in the "hen-wife's" mode of feeding poultry, a great heap is thrown down, and the birds allowed to "peg away" at such a rate that their crop is filled too rapidly, and the process of assimilation is slow, painful and incomplete. No wonder that so many cases of choked craw are met with under this treatment. Many other diseases which affect chickens might be prevented by breeders, were a little precaution taken in the simple matter of feeding.

TO PRODUCE EGGS.

More eggs can perhaps be obtained from hens by mixing breeds than by any other mode; and it is generally conceded that crossing also promotes the health of fowls far more than the vile practice, as some are pleased to term it, of in-and-in breeding. Little trouble need be apprehended from roup, gapes, cholera, and other diseases in poultry, if that care is observed in breeding and crossing that is so essential to all well regulated poultry yards.

POSITION OF THE HENNERY AND RUNWAYS.

As we said before, the hennery should be placed in a warm, dry location—(not in a damp, out-of-the-way place)—with runways ample to allow of plenty of exercise. Above all, care should be taken that vermin do not get a foothold in the hennery; for if they once make their appearance, it is difficult to exterminate them, and before the breeder is aware of it, his flock is over-run with them. Let the hennery be thoroughly cleansed with lime, (whitewash put on hot,) as often as once a month. If any of the fowls show symptoms of disease—which is frequently the case when in confinement—see that they are removed at once from the flock. Give good, wholesome food, with plenty of clean water; have the laying boxes cleaned and renewed frequently with straw, hay or shavings, and with the help of the good housewife and children, there need be no fear of failure to profitably raise poultry. If one does not succeed in the first undertaking, he should not become disheartened, but persist in his endeavors to find out the cause of failure, and obviate it in the future.—*Lewis' Practical Poultry Book.*

DEATH OF CATTLE BY SMUT.—A correspondent of the Black Earth (Wis.) *Advertiser* says:—"For the benefit of those who avail themselves of the usual benefits of corn fodder as feed for stock, I wish to state through your paper, that Mr. Timothy Lee, of Dazomanie, lost by death, on the 12th inst., one cow and two heifers, from a cause that at first appeared quite mysterious, but on examination of the stomach, smut and corn were found in such an abundance that it was no longer a mystery, and the conclusion was that they died from the effects of a poison generally known as corn smut. The smut was eaten on the hill where the corn had been husked, except such ears as contained that excresence, which Mr. Lee considered worthless and harmless."

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To our Friends in Arrears.

Those of our friends in arrears for the *Farmer* would confer a favor on the publishers by remitting the amount of subscription due. The expenses attending the publication of a magazine like ours is very heavy, demanding a large outlay of money for paper, printing, binding, &c. The low price of subscription makes it but a small matter to each of our readers, but when aggregated, a considerable sum to us. Considering these things, we hope all will promptly remit the small amount due, and thereby enable us to "go on our way rejoicing."

The Third Annual Exhibition of the South Western Iowa Fair Association, will lbe held at their grounds, at Red Oak Junction, Iowa, beginning on Tuesday, October 3d, to continue four days. $5,000 in premiums are offered.

THIRD ANNUAL FAIR OF THE MARYLAND STATE AGRICULTURAL AND MECHANICAL ASSOCIATION.

The Third Annual State Agricultural Fair will commence on Tuesday, the 3d of October next. It is gratifying to know that it will be undertaken by its energetic officers with a determination to make it a success. All the preliminary arrangements have already been made. A pamphlet is already issued—giving a list of the officers of the Association, also a list of the premiums to be given, and the names and functions of the awarding committees. The list of premiums is quite long and the sums to be awarded very liberal, and what is more to the purpose all the premiums awarded will be paid. This we regret to say was not the case last year, and exhibitors necessarily were many of them greatly disappointed. The cause of this failure on the part of the Association was the great excess of expenses over receipts. This year things will be managed better, and to guard against any possible disappointment, a number of gentlemen—members of the Association—have agreed to make up any deficiency in the receipts that may possibly arise out of their own pockets. In other words, *they guarantee that all the premiums awarded shall be paid.* Better arrangements will also be made for reaching the fair grounds, and thus another and a fruitful source of annoyance to intending visitors will be removed. In a word, the officers of the Association are fully alive to the necessity of doing every thing that lies in their power to make the fair attractive, to secure the comfort of visitors to it, and to give satisfaction to exhibitors. Among other things there will be trials of speed, for which premiums will be awarded, every afternoon during the fair. A new feature will also be introduced.—There is to be a "Farmer's Race" for silver valued at $100. It will be full of fun, for the race is to resemble the old donkey races. *The slowest horse is to take the premium,* the competitors riding each other's horses.

We do not know that we can say any thing more at this time to call attention to the coming fair.—We may add, however, that the officers of the Association are earnest and energetic gentlemen, that the premiums offered for the best cattle, horses, sheep, swine, poultry and other birds; for grain and root crops, vegetables, fruits, flowers, agricultural implements and machines, carriage and leather manufactures and miscellaneous articles are on the most liberal scale and will be honestly awarded without distinction of person or any favoritism whatever.

WILLOWS.—You can kill willows by cutting them close to the ground in the hot weather in August.

For the Maryland Farmer.

GARDEN AND GARDENING.

It is an old saying that "a good garden supplies nearly the one-half of a poor man's living." And its products are equally valuable to the man of wealth, since vegetable food not only saves a great deal of bread and meat, but is at the same time cheaper and wholesomer than animal food.

And now let us notice our most valuable garden vegetables.

1.—*Potato.*—The potato is decidedly the wholesomest and best garden vegetable in the world. It supplies the want of bread and meat to a greater extent than any other vegetable does or can; for we never get tired of this vegetable food, but can eat it at every meal, and always with the same relish. And we do not know the worth of it until our potatoes are used up, and we have no more to put upon our table. No meal, however varied, rich and fine, is considered complete if the potato is wanting. And hence every householder, whether rich or poor, ought always to have a good supply of potatoes on hand for his family's use. As a general thing, however, we only raise potatoes enough in our gardens for *early* use, and look to our out-lets and farms for our autumn and winter's supply, because this crop would require too much room in our gardens.

2.—*Beans.*—The bean as a food possesses the strength-producing properties of meat to a greater degree than any other vegetable, and so, in summer, forms a valuable substitute for meat. A small patch of ground will produce a large amount of beans, that in their green and dried state make a very palatable and wholesome food in summer, autumn and winter.

3.—*Cabbage.*—The cabbage when boiled in its natural green and sweet condition with pork or beef makes a delicious and very wholesome summer, autumn and winter food. And it is equally delicious and wholesome in its sour or *sauer-kraut* form in winter when boiled with nice fat pork or beef. Our Germans, of Pennsylvania, are so fond of cabbage that they are often called "*the sauer-kraut Dutch*," by way of derision, but that don't hurt us a bit, or make us the less fond of this favorite food. And many of our English and Irish people are equally fond of it, and are beginning to make cabbage one of the standard crops of their gardens.

4.—*Tomato.*—The tomato, when properly cooked, salted and spiced, makes a cooling and very pleasant and wholesome sauce, that never comes amiss to most people, though used at every meal in its season. And a supply of canned tomatoes for winter use, and until tomatoes ripen again, is now a subject of careful attention by every good housewife. And this vegetable, with its cooling nature, and fine sour taste, comes into use just at the season of the year when our stomachs crave a food that possesses a cooling and acidulous nature.

5.—*Cucumber.*—The cucumber forms a very nice and valuable appetite-creating food or pickle, for those seasons of the year when our stomachs crave something that is of a sour, sharp and cooling nature. Many people are also very fond of fresh cucumbers when sliced, salted and peppered, but their tempting taste should not induce us to eat much of them in that form, as they are unwholesome.

6.—*Onion* —The onion contains within itself a large amount of nourishment, and forms an excellent appendage to other foods, by imparting its peculiarly sharp and appetite-creating flavor to our other more tasteless vegetable and animal foods. And therefore every family should have a moderate supply of onions for summer, autumn and winter use.

These are, in my opinion, the most valuable vegetable foods produced in our gardens, for carrots, beets, parsnips, peas, radishes and salad, however desirable once in a while by way of variety, can never be relied on as our daily food, and so should be grown in our gardens as mere luxuries, instead of necessaries.

Rules for Successful Gardening.

The following rules of gardening, derived from long study, observation, and general experience, may be useful to some of your readers:

1. Never (if you can help it,) dig your garden until its ground crumbles to pieces when thrown up by the spade. For no growing plants can properly make their way up into the air through tough and cloddy ground.

2. Never plant your seeds until the ground is dry and crumbly, and the air is warm, for frosty nights and long cold rains will either kill your young plants, or stunt them so much that they will never get over it.

3. *Keep your garden plants as free from weeds as possible*, for no garden plant can grow vigorously and do well among weeds. And the sooner you rid your plants of weeds the better. The best time to get rid of weeds is just after a rain or shower, for as the ground is then soft, you can easily pull up the weeds, roots and all, and throw them to your pigs, who will eat what they like, and convert the residue into a good manure.

4. *Keep the ground around your growing plants loose and mellow*, but you should never hoe your garden plants when the ground is very wet, as the wet soil then turned up against your plants will make your plants turn yellow, and so be injured by the operation. You can pull up weeds to great

advantage, however, when the ground is quite wet, and that is the best time for it, as they can then be pulled up quite easily. But after your garden ground has got rid of the water that would make the ground stick fast to your boots, you can begin to hoe your crops without any danger of their plants turning yellow. And this, I find, is a very good time for hoeing plants, as the ground is then soft and easily worked. We often hear the remark after a long rain or heavy shower, "*It is too wet to work in the garden,*"—and that is often true, unless we confine our work to pulling of weeds.

5. *Hoe your garden crops often and very carefully in times of great drought, when both the air and the ground are very hot and dry.* A long spell of dry weather hardens the top of the ground into a crust, that covers the soil just as the crust of a baked pie covers its interior parts. And this hard earthen crust is so thick and close-textured that it keeps the dews of the night, and the cool night air from penetrating down into the soil around the roots of your garden plants, and so will make them stop growing, and turn yellow in color, and look as if they were drying and shrivelling up. And now what is the remedy for this evil? Why it is simply that the frequent and careful turning or hoeing of the soil, for that will break up this "pie crust," as it is called, and let the cool air and dew of the night sink down into and through the mellowed ground, until they reach the roots of your plants, and so revive them and keep them in a nice growing order, and of a rich and healthy dark green color of leaf and stem. And yet this is the very time when we hear people say, "*It is too dry to work in the garden!*" but a greater falsehood could not well be imagined in gardening operations. I have always made it a rule to work my garden the most in the dryest weather, and I have in drouthy seasons always had a fine growing garden, when my neighbors, who did not work them at all, had poor gardens. I have now given you the reasons for this difference, and these remarks apply with just as much force to our field or farm crops of corn, potatoes, &c., as they do to those of the gardens. Now reader, if you doubt my theory, just try it in your garden and fields during our coming summer drouth, and report the results to the "*Maryland Farmer.*"

6. *Let no weeds in your garden ripen and scatter their seed,* because they will fill your garden with new crops of weeds the next year. This may be prevented by cutting the weeds off with a sickle while, or before they are in blossom, and burying them in the ground, where they will form an excellent manure for your growing plants. *Small* weeds can easily be cut down and covered with earth, when you are hoeing your plants, and will in that condition answer the double purpose of a mulch and a manure; while *large* weeds, those too large to be used in this way, should be pulled up and thrown to the hogs.

Sometimes an undug and unplanted garden bed gets so full of large ugly weeds, that we hardly know what to do with it. I had just such a bed a few weeks ago, but I went to work and dug up the bed when the ground *was very dry, and so hard that I could scarcely get my spade into it,* but I persevered in turning my weeds upside down, and now that whole bed is free from weeds, and I have a fine growing crop of luxuriant cabbage and tomato plants on its surface, that will pay me handsomely for my labor. So you see here again that I differ entirely from those who, at such times, say "*it is too dry to work in the garden!*" and that I have good reason for differing from them, since this bed will give me good cabbage and tomatoes this year, and will be nearly free from weeds next year.

7. Let your *garden walks* be covered with a mixture of *white and red clover, and your natural grasses.* This is something new in gardening, the very opposite of *bare* garden walks, free from everything green, and I came to its practice this way: last year (1870) I had so much work of various kinds on hand that I failed getting one of my garden walks cleaned, and it soon became covered with a spontaneous growth of intermixed red and white clover, and some natural grasses. I cut its tops off occasionally with a sickle, and so treated, found I had a nice, clean and beautiful garden walk there. This year (1871) I have another such a green-coated garden walk, and am so well pleased with it that I intend to let *all* of my garden walks hereafter have such green coverings. The labor of cutting this grass, and keeping it within proper bounds as to height, is far less than that which is necessary to keep our garden walks of *bare* earth free from weeds. And when the grass begins to run up on our garden beds, it will be an easy matter to spade that straggling portion of it into the ground, and so stop its spreading. These garden walk grasses when sickled off produce a choice and wholesome food for my pigs or cows, and leave my walks the more beautiful. If your ground will not produce these clovers and grasses without sowing, you ought to sow a mixture of these seeds in your garden walks, properly loosened up to receive the seeds.

You will see from this paper that I do not belong to the "*Old Fogies*"—that stereotyped, stand-still class of gardeners and farmers, who move along in the old beaten tracks of their fathers and grandfathers, as if it was a sin to get out of that track, but belong to the "*Progressives,*" those who think

that we are still able to make some progress in knowledge, and learn many easier and better ways of doing things than our ancestors had. And so if I am in error in any of my ideas aforesaid, I am ready and willing to be corrected, and learn wisdom, better things, from any of your readers.

JOHN F. WOLFINGER.

Alviva, Union County, Pa.

Cheese Making.

WAXAHACHIE, ELLIS CO., TEXAS, May 22d, 1871.

To the Editors of the Maryland Farmer:

Will some of your readers be kind enough to give one of your regular subscribers (for the last five years,) a good plain description of cheese-making, from the milking to the boxing. All the press and other machinery, and the name of some house in your city or New York, where the necessary fixings can be bought to start a factory on a small scale, say twenty-five or forty cows. Our cows down here in Texas will give about two gallons of milk each milking, and the butter is as yellow as gold. D. B. C.

We have but little knowledge of cheese making, and would therefore ask some one of our correspondents to give us the information sought.

List of Premiums of the Maryland State Fair.

Copies of the List of Premiums of the Third Annual Fair of the Maryland State Agricultural and Mechanical Association, to be held at the Fair Grounds, Pimlico, near Baltimore, to commence Tuesday, October 3d, 1871, and continue four days, can be procured by addressing the General Secretary and Treasurer, DAVID C. TRIMBLE, Esq., office, S. W. corner of Charles and Lexington streets, Baltimore, who can also be addressed upon all subjects appertaining to the business of the Society.

WHEAT CROP IN MARYLAND.—The monthly report of the Department of Agriculture for June says: The reports from Maryland are equally favorable as to average condition. A few drawbacks are reported from the Hessian fly in Talbot, Queen Anne, and St. Mary's. In Talbot the joint-worm is troublesome. While the injury in St. Mary's, from the rust and fly, is severe, the superior condition of the crop will compensate for this deficit and place the prospective yield above the average.

DISUSE OF FERTILIZERS.—The Agricultural Report for June, speaking on this subject, says: A very general disuse of fertilizers is reported in Georgia and the Carolinas, where last year their application was almost universal, and in many instances, excessive. This fact may contribute to a reduction of the aggregate yield of the year. Their cost was found to be disproportionate to the increase in production at current prices for cotton.

CANNING FRUIT.

An abundance of canned fruit "is a good thing to have in a family," both as regards health, comfort and enjoyment. All who are in the habit of laying by in this way large stores of the different kinds of small fruits in their season, are convinced that it is a paying investment; and with the most it has ceased in a great measure to be regarded as a luxury, but is rather classed with the necessaries of life.

Many who have plenty of fruit, or who have the means with which to purchase, neglect to can it on account of the trouble or expense, but they will dry or make into preserves their surplus, with much more labor, and at a much greater expense; while fruit thus prepared will require more care and be less palatable than when canned.

If properly done, canned fruit requires but little labor in its preparation, and little attention afterward, and is the least expensive mode in which it can be preserved.

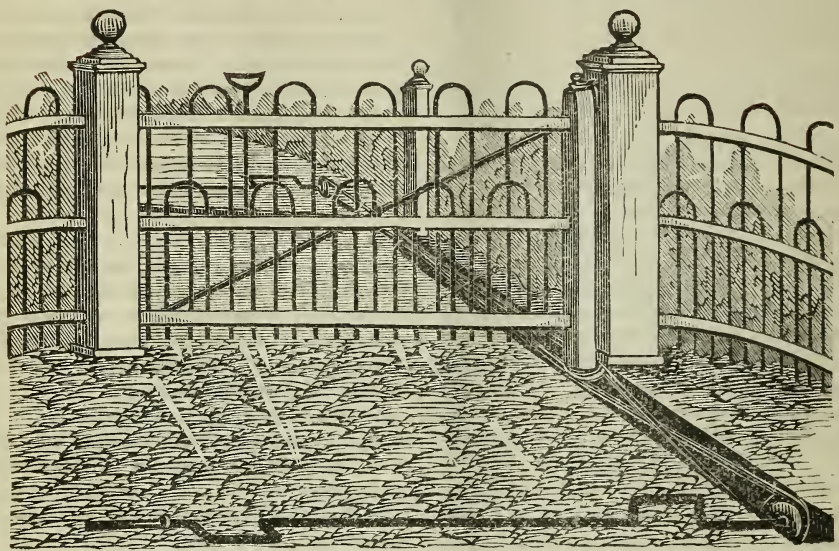
We have lately given a number of methods for canning, and now we will add the one we have practiced for a number of years, and which we have found very successful.

We use glass jars as the cheapest in the end, and the most easily taken care of. Pick over the fruit and fill the jars. Take a common wash boiler, and make of lath, fastened together by two or three cross-bars, a frame fitted to the bottom of the boiler, to keep the jars off the bottom, and to permit the heat to pass readily up through. Place the jars in the boiler and fill it with cold water up to the neck of the jars. Put slats on the top of the jars, and put on weights to prevent them from tipping and filling with water. Bring the water to a boiling point, and boil from ten to twenty minutes, according to the quality of the fruit. When the fruit is well thro', take out one jar at a time; when the fruit has settled fill up from another jar. Have a preparation of sugar and water—one pound, or a pound and half, as preferred, to a quart of water—keep boiling hot, and fill up the interstices between the fruit with this; have each jar completely filled, and then put on the cap and seal up as directed. If sealed up in this way, and the jars are air-tight, there will be no trouble about the fruit keeping. We have common red currants put up in this way four years ago, that are in first-rate condition now. The less sugar put in at the time of canning the more natural will be the taste of the fruit on opening.

After canning, the jars should be cooled gradually, and kept in a cool and dry place.

Why are farmers like fowls? Because neither will get *crops* without industry.

BOWNE'S ANTI-FREEZING SELF-OPENING GATE.



We have frequently heard the remark that a really practical low priced automatic gate, the machinery of which cannot easily become deranged and one that cannot freeze, has never been invented, but all these serious difficulties appear to be overcome in the one represented above. It was patented by Robt. T. Bowne, of Fallston, Harford County, Md., on the 25th of last April, and notwithstanding the short time it has been before the public a large number are in successful operation. By referring to the engraving the advantages of this gate can be seen. 1st.—The wheel crank is on the driver's right in passing through from either direction. 2d.—By entirely dispensing with any crank or lever and using a wheel on the crank rod and one under the gate, operating the gate with an easy rolling motion, which may be done by even a rapidly passing vehicle without danger to the machinery, as the power is applied always at right angles, and not in the acute and obtuse angles necessitated by the use of the crank. 3d.—The wires or wire ropes connecting the wheels being drawn tight by swivel screws and coming in contact with nothing between the wheels all possibility of freezing is removed.—4th.—By the use of the simple spring near the gate wheel a high wind cannot affect the operation of the gate. 5th —The rapidity of motion may be regulated by shifting the gate bottom in different holes. 6th.—The gate is strong, light and tasty, is made of galvanized iron, and the price ($45) being much below any other self-acting gate.

☞ Subscribe to the Maryland Farmer.

Renovating Worn Land.—At a recent meeting of the American Institute Farmers' Club, when this question was called up, one of the members said that the most effectual method in his opinion was to turn under clover, peas or buckwheat. It was objected that buckwheat contributed but little to the restoration of exhausted land; clover and peas are well adapted for this purpose—the former being especially. A. M. Curtis contended that manure was always the best medicine for worn out land. In the absence of a fertilizer it is well to plow deep and sow with peas or buckwheat, and turn it under when the crop has attained full growth, and then sow with rye, and in the spring seed with clover. Take off the crop of rye and leave the clover until the second year, and when it is in blossom plow that under and sow with wheat or rye again, and seed with clover. Treated in this way land will certainly improve. After the second crop of rye or wheat has been taken off, the land will be in good enough condition, usually, to plant in corn.

The Turnip Fly.—Those who do much in growing the turnip, experience more or less inconvenience from the fly upon the young plants. An English farmer says: "For the last fifteen years, on sowing turnips, I provide, ready slaked, one ton of lime per acre. As soon as the plants appear the lime is spread from a cart over the young plants in the rows. In hot seasons the plants have had rough usage from their tormentors, but sufficient plants escape. I never missed a crop, nor have I had to sow a second time. The lime must be put on dry, and on a warm or hot and dry day; for if any dew or moisture be upon the plants they will be destroyed. The lime must be ready to put on the moment the mischief begins, for in the twenty-four hours of a hot season the fly can ruin any crop; it is no use then going for the lime."

THE PRODUCTION OF HAY.

At a recent meeting of the Norfolk Pomological and Horticultural Society, held at the residence of Gen. R. L. Page, near Norfolk, in the latter part of May, among other business transacted the following paper was read by Mr. Leighton, President, on

THE PRODUCTION OF HAY.

The attention of farmers in this section of Virginia has been so little directed to the production of hay, that many are in doubt whether it can be made a remunerative crop.

While this subject does not come legitimately within our sphere, its importance is the apology for its intrusion.

Having watched the hay crop on my farm for the past four years, and having observed its luxuriant growth on that of others, I have confidence in making the statement, that the crop compares favorably with that in any New England State, acre for acre.

My experience in hay making may render a few suggestions on that point of greater practical value than any other I can present.

Grasses should be cut while containing the greatest amount of nutritious juices, which occurs when in full bloom, and the earliest blossoms beginning to fade.

Much grass is left too long before being cut.

It is well understood among experienced hay-growers that the saccharine juices disappear as the seed matures.

Too much attention cannot be paid to the treatment of hay from the scythe to the barn.

As soon as the dew has disappeared in the morning a spreader should follow the mower, scattering the grass evenly over the ground.

If the sun is shining clearly, the hay should be again thoroughly turned and shaken at the expiration of about three hourse, and if not thick, raking should be commenced about three hours later, when it is prepared for the barn; but if the hay is thick or not spread early in the day, it should be raked before the dew falls, and put up in bunches of about 100 pounds each, well shaped to turn rain, and if nearly dry, the balance of the curing process can be completed without further spreading. If only partly cured, the branches should be spread the following day after the dew has fully disappeared, giving it a second turning and shaking a few hours thereafter, when, if the weather is favorable, the hay is fit for the barn.

Too much exposure under our hot sun is injurious to hay, and renders the frequent turning more necessary than in a more Northern latitude.

Much care must be exercised in guarding against the influence of dews on wilted grass. It weakens the strength of the hay, and deprives it of the element requisite for fattening stock, or producing milk by destroying the sugary matter which the stalk contains, and on clover causing the shedding and loss of the fine leaves, leaving the woody fibre deprived of its best nutritive qualities.

In the hay producing districts North, they place such value on the exclusion of dew from their wilted grass, that their hay fields at night present the appearance of a vast cemetery, their hay cocks being covered with white sheeting about one and a half yards square.

When overtaken by showers from field to barn, or where moisture is apparent in any portion of the hay, the application of from one to three pecks of salt to the ton has a most beneficial effect, destroying, or preventing the must that would otherwise germinate, which is so detrimental to the health of animals fed thereon.

The best New England farmers have used salt freely for the past forty years, on hay fed to their own stock, and the poorer the quality of the hay, the more freely they use salt, excepting in cases of dampness, as before named.

In this latitude where droughts so frequently occur in summer, it is safer to let after-moth (second crop,) remain untouched until the fall rains commence, then lightly roll or brush over the field that the growth may more speedily decay, and be less in the way of the scythe the following year.

It is false economy to turn stock into the hay field in the winter, the ground being soft the roots become mangled and exposed to frosts, diminishing the succeeding crop more than to double the value of the feed thus obtained.

With the advantages which nature has so generously bestowed upon us, we should not look with indifference on the invoices of hay annually landed at our port, drawing from us many thousands of dollars, when we are not only able to be self sustaining in this department, but to contribute profitably from our soil in supplying the want of our sister State, North Carolina, whose soil is less favored with the grazing element.

For the better accommodation of those who use hay in the cities, with limited space for forage, neighborhoods should club together and purchase compressing machines.

As hay cannot be compressed until it has matured in the mow, which requires several weeks, no clashing of interest need arise as to priority of its use in a neighborhood.

If this process of maturation, which may be properly called a species of fermentation so necessary for the development of the sugary qualities of the hay, a question may arise with societies, whose province it is to discuss this subject, whether salt is not an active agent in producing this fermentation, particularly in hay too long exposed to the sun.

General Page endorsed the remarks contained in Mr. Leighton's essay on hay, and Mr. Leighton's paper was ordered to be spread on the records of the Society.

Horticultural.

PACKING LARGE FRUITS FOR MARKET.

The abundant crop of apples this year through large districts of this country, naturally suggests the inquiry, how shall we find the best market? We can answer this question very promptly. By selecting only good specimens, and packing them in the best manner. If this were uniformly done every season, and the owner marked every barrel or package with his name, his fruit would acquire a reputation for its excellence, and he would be able to dispose of his crop without difficulty, at full or high prices, even when the market was heavily overstocked with poor or common stuff.

Pear growers have learned the policy of assorting their pears; apple growers should do the same. All the marketable fruit is too commonly put promiscuously into the barrels together. It would sell much better, where known, if separated. Assort by having two if not three baskets, placing the different sizes in each. Another for extra beautiful specimens, for fancy markets, would be a good addition; the barrels containing them should be marked "extra." A few large apples mixed through many medium sized ones, spoil the appearance of both. Well assorted specimens of uniform size, even if not large, sell well—better than with large ones mixed through. A barrel of mixed pears has been separated into two portions, and the larger sized, less than one-half, has sold for more than the whole would bring at first.

Dr. Holmes, in his indications of the approaching millennium, mentions a supposed improvement in the mode of packing small fruits—

> When berries, whortle, rasp and straw,
> Grow bigger downward through the box.

It is not so in packing apples and pears, as the man who puts all his best towards the spectator will be soon found out, and be unable to sell his good fruit for its real value.

Apples for long conveyance are universally packed in barrels. Every one knows that they should be firmly held by pressure, so as not to rattle. Nothing will sooner or more certainly ruin fine fruit than the slightest looseness in the package. In filling a barrel with apples, it requires but little longer to arrange them carefully, and they will keep and carry better for it. Shake them a few times very gently while the barrel is filling. The upper stratum should be laid as even or as straight as possible, so that the head may press on all alike. If they are a little indented no harm will be done, as the dry wood will absorb the moisture. As a general rule, apples in a barrel may lie an inch above the place for the head, their elasticity causing them to sink an inch under the pressure. Some apples of a rather spongy texture, will yield still more.

Pears should be always packed in half barrels. They sell more readily at this size, as few consumers wish to buy a whole barrel at a time; they carry with less bruising or jar from weight, and they may be more neatly or perfectly packed. First, procure the necessary quantity of good, thick, white printing paper. Turn the barrel bottom up, and place in a sheet of the paper smoothly and neatly to place the pears upon. Put them in by successive layers, placing the paper around the sides, until the barrel is full, and then cover the fruit with paper, so that when the head is put in there will be a complete lining of paper around the whole. The more neatly this work is done, the better the pears will sell, for the purchaser will see that the fruit was *worth* this care, and it will be appreciated. The finest pears in the world thrown in carelessly, and roughly put up, will convey the impression to buyers that they were not good for much, and not worthy of the best care.

A pressure on the head of about three-fourths of an inch will keep the whole package snug, and prevent rattling. Skillful marketers of pears know by the appearance of the specimens about how long it will be before they are ripe. They pick the ripest first, and leave the greenest on the trees.—They ship them while yet quite hard, so as to carry safely, but so as to be ripe enough for market at about the time, or soon after they are expected to arrive; or, if shipped earlier, special directions are given to the consignee to examine them for this purpose.

In order to get the best prices, the fruit grower must take special pains to grow fine pears. The trees must be thrifty, well cultivated, the fruit protected from insects, and well thinned while growing, by leaving the best and taking off injured or defective specimens; and the whole crop must be assorted at packing. The very finest, such as will bring $20 to $30 per barrel, are to be marked "extra;" the rest successfully "first quality," "medium," "second quality," &c. Packing and marketing well is a trade of itself, and on their proper performance depends the difference between heavy and satisfactory profits on one hand, and small returns, hardly enough to pay expenses, on the other.—*Country Gentleman.*

Curiosities.—Mr F. C. Kemp, of Kent Island, Md., says the *Observer*, has a goose which laid this season two eggs 6 inches long and 3½ inches in diameter. Each of them contained two yelks, and another hard egg. The same goose afterward laid an egg of common size, but with a snout about four inches long. The same gentleman had a chicken hatched out with two distinct bodies, joined at the side, and with four legs.

MULCHING BEARING FRUIT TREES.

There is no doubt now by our most intelligent horticulturists about the practical advantages to be gained by mulching the surface of the orchard and fruit garden. This should be more generally practiced in fruit producing districts, for it is the least expensive and most effective method of protecting the fruit trees against the bad results often following the frequent and sudden changes of temperature during the summer and fall months, when the surface of the ground is left exposed to the direct rays of the sun. Again, when the mulch is put two or three inches in thickness, the surface soil is constantly moist and loose, even when no rain falls for a term of several weeks, and the trees or fruit receive no check for want of moisture and food under such circumstances.

My method is to cultivate the spaces between the rows of trees in the orchard, using a small one-horse plow and cultivator, running not more than two inches deep, during the early part of the season. From the 1st to the 15th of July I have put on a heavy coating of salt hay, covering the surface as far as the branches extend. After this there is no more trouble with weeds or grass. There may a few scattered ones start up, but they are easily destroyed.

Every fruit grower knows that two or three weeks before the time of gathering the main crop of fruit, fine specimens are constantly falling off by strong winds. When the ground is mulched the majority of such specimens are not bruised or injured for sale. This saving alone I considered pays me for the trouble of mulching the orchard.

There is only one serious drawback to the application of mulch, that is the danger of the hay or straw getting on fire when rendered dry by continual warm weather.—P. T. Quinn, in *N. Y. Tribune.*

Exportation of Fine Cattle.—We have been in the habit all our lives, says the *American*, of chronicling the importation of fine stock from England to improve our herds of cattle, but we are now in part repaying our friends across the water by forwarding some specimens which it will be hard to beat. Mr. Cochran, the celebrated New York breeder of Short Horns, has shipped per steamer Prussian, from Portland, for parties in England, a beautiful heifer, "Eleventh Lady of Oxford," and bull calf "Duke of Hillhurst," of the true Duchess tribe. The bull is a deep cherry red, with a touch of white on lower line, and full coat of long, soft hair. The heifer is a rich roan in color, and a superior specimen of her family. The price of the heifer was seven hundred and fifty guineas—the highest price yet paid for one of this tribe. The bull brought eight hundred guineas—both animals at risk and expense of purchasers from Hillhurst, the residence of their breeder.

The Florist.

FLORICULTURE---FOR JULY.

PREPARED BY JOHN FEAST, Florist, Baltimore.

The present month has been very favorable for most plants, particularly the bedding out plants; having had frequent rains. Now is the season to look after the winter flowering stock; repotting such as need it, and plunging out in the borders, or placing in a proper situation to encourage their growth. All winter flowering climbers should be pruned by cutting out all the superfluous branches, and heading those left. Keep them clean by syringing, and collect the different soils and manures to have in readiness for use the following winter.

Azaleas—will now have made their growth, and should be kept in a cool, airy place, to harden; give freely of water till they set their buds. Repot what is wanted, and in larger pots, but not over pot them, as they are far easier kept in small pots than large ones.

Camelias—Should have regular syringing every day, in dry weather. If any need repotting this is a good time. Pinching may be done to increase the stock.

Chrysanthemums—Should be topped, and cuttings put in, if young plants are wanted. Repot the old plants, if in pots, and give them liquid guano to make them grow strong, and by fall they will be vigorous plants.

Pelargoniums—Will now be done flowering; cease giving much water, when hardened and dried off; cut down to two or three eyes, when they show signs to start into growth they may have more water. Repot in fresh soil, and put in cuttings for a young stock.

Chinese Primroses—Should be kept in a cool, shady place; they require little water in summer. Sow the seed now if you would have plenty of plants for winter.

Heaths.—Prune in proper shape, and increase by cuttings.

Fuchias—Should be encouraged by shifting to larger pots. Keep them in a shady, cool place, and give freely of water.

Euphorbias.—Repot at this time and cut down, so as to make strong plants for winter use.

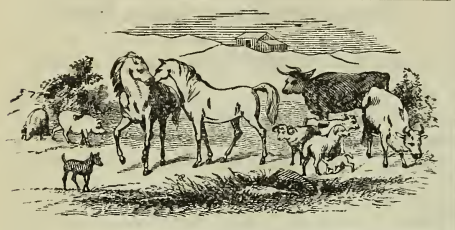
Cactuses.—Many kinds will be flowering—supply with plenty of water when growing.

Calcealarias, Cinerarias, and other seeds, for next spring flowering, should be sown now in proper soil, but cover very light, and be careful in watering.

Helietropes—And other winter flowery plants, should be headed down, to have bushy plants for flowering in winter. Keep up a stock by cutting or otherwise, and see that the plants go in the houses clean, and in good health.

Care of Teeth.—Put a piece of quicklime the size of a walnut in a pint of distilled water. Clean the teeth frequently with this fluid, washing the mouth well with clean water afterwards. The application will preserve the teeth and keep off the toothache, and will harden the gums.—*A correspondent of the English Mechanic.*

Live Stock Register.



BOTS IN HORSES---SURE CURE FOR.

Editors Southern Cultivator :—You have published many articles on the subject of bots, but, as this may be considered a practical instead of a scientific article, I think it may prove profitable to many of your readers. Some writers tell us that the bot cannot hurt the horse. About twenty-five years ago I had a practical test of the incorrectness of this theory, which settled the matter in my mind, and have no doubt saved me many a dollar. My horse was taken ill, and some of my neighbors pronounced it a case of colic, and we treated it accordingly for about two hours, when finding he was likely to die, another neighbor was called in who was said to be very successful in treating diseased horses.

After examining him a minute or two he pronounced it a case of bots, and administered the following drench: Strong sage tea, one quart, pulverized alum, a heaping tablespoonful, and molasses (or sugar) one teacupful. In ten minutes the horse got up and went to eating grass, and was never more sick while I owned him. My neighbor told me that sage tea was a specified poison for the bot, and would kill them when Aqua Fortis would not, and since that time, whenever I see my horse toss his head around as if to brush off a fly when there is none disturbing, forthwith a drench is administered as above, and I have never had a horse sick from the bots since.

Though not perhaps appropriate, I will add a few lines concerning colic. A great many farmers lose horses and mules from colic when they might readily save them. The horses or mules are worked freely, and then entrusted to negroes to water, who ride them into the water and allow them to drink whilst heated just as much as they desire, and the next morning the owner is telling his neighbor of his bad luck, that, when he went to the stable he found his mule dead Now, if the owner will cause his foreman or manager to see to it that, at every third or fourth swallow the head of the horse is pulled up and held for a few seconds he may be allowed to drink as much as he pleases, and never will have the colic.

I have ridden my horse until there was not a dry hair on him, and on coming to a stream let him drink until he was perfectly satisfied, and never had a horse to suffer a single minute from it. By pulling up the head and making the horse pause, the small quantity of water taken in three or four swallows will be warmed to the natural temperature, and no evil results can follow; but if allowed to drink freely and without interruption, while overheated, he will probably die in less than twelve hours.

Furthermore, if the horse does not have the colic the digestive apparatus is thrown out of order considerably, and the horse loses flesh and cannot stand to his work; while, if the above plan is carried out, the owner will avoid any risk of colic and keep his horse in much better order.

Just here, while thinking of plough horses, my mind wanders off to another very frequent cause of the bad order plough horses are found in. Directions are very generally given to regulate the draught of the plough by the back-band. Now, if farmers were aware of the fact that, by so doing, they put such a strain on the kidneys, that they cannot possibly perform their physiological functions in a proper manner, and that a horse will fail in flesh quicker from a failure of the kidneys to perform their functions in a proper manner, than from the failure of any other organ, they would see to it that the back-band is never placed too far back. If the draught of the plow cannot be altered except by placing the back-band over or near the kidneys, the stock should be altered so as to secure the draught desired, and the back-band kept at or about sixteen or eighteen inches from the loggerhead in the hame; then, if well fed and curried, the horse will keep his flesh and stand to his work. I have seen many horses injured and impaired in value by the back-band not being in the right place; but, as it was not my business to direct the management of another's horse, nothing was said. Nevertheless, I write, hoping a friendly hint through your paper may be received with more favor than a private conversation would be likely to meet with.

And now, lest my mind should wander off to something else, I had better stop.

B H. Washington, M D.

Augusta, Ga , August, 1870.

It should always be borne in mind that there is an unending, active competition now in farming as in every other pursuit, and he who would be successful must be on the lookout to secure all the assistance he can procure, all the advantage that science, inventive genius and research can offer, to make his labor profitable, and to enhance the fertility of his land.

SUMMER MANAGEMENT OF HOGS.

If hogs are furnished with a good pasture, with a variety of grasses, a good supply of cool, running water, both to drink and to bathe in, and a moderate supply of grain in some form, they are in warm weather in their natural element, and are then in the best condition to ward off disease and make rapid and profitable growth.

Many good swine-breeders prefer not to give their hogs any grain during the summer months, leaving them to depend entirely on grass. But my experience is, that there is no season of the year when it pays better to feed grain to my hogs. It then takes much less grain to put them in market condition, and it also takes much less time, enabling the farmer to market his hogs early, before bad weather, and before the glut in the market, and the decline in prices that usually occur early in the winter.

If I have a given amount of grain to feed my hogs, I prefer decidedly to divide it, and feed a portion during the summer in preference to giving it all in the fall at fattening time, as I think I not only get more pounds of pork to the bushel of grain, but I have heavier and better fattened hogs.

Some farmers object to summer feeding on account of their hogs' squeeling around for feed, and not eating grass. But I have experienced no such difficulties. There is nothing hogs like better than grass, and it does not seem reasonable to me that they will refuse to eat grass because they are partly fed on grain. The hog likes a variety of food at all seasons of the year, and it is well to pander to his wants in this respect.

Sucking sows and small pigs should be supplied with a choice pasture, and all the grain they can eat, and a house to run in out of the hot sun, and out of storms. And their grain should not be corn only; they need a variety to keep up their appetites. Oats are one of the best grains I have ever tried to make sows give milk and to make pigs grow. But the hull is so hard and thick, it needs to be mixed with corn and ground, and then soaked or cooked; soft cooking without grinding would perhaps answer, though I have not sufficiently tried it to speak positively.

Hogs of all classes should at all times have, in addition to grain and grass, a supply of stone coal, or charcoal and salt. A portion of sulphur seems also to be beneficial, but should be fed with care to sows that are with pigs, as it will, if fed in large quantities, cause abortion. The coal and salt are best, placed within their reach, and let them eat as they require, nature being the best guide as to the amount required — *Cor. Western Rural.*

The Maryland Farmer $1.50 per annum.

RULES FOR THE CARE OF SHEEP.

We copy the following suggestions about sheep from a circular issued by F. C. D. McKay, the General Agent of the American Emigrant Company.—The company have already over 10,000 sheep scattered among the farmers who purchased land of them, in flocks ranging in size from fifty to two hundred head:

1 Keep sheep dry under foot with litter. This is even more necessary than roofing them. Never let them stand or lie in mud or snow.

2. Take up lamb bucks early in the summer, and keep them until December first following, when they may be turned out.

3. Drop or take out the lowest bars as the sheep enter or leave a yard, thus saving broken limbs.

4. Count every day.

5 Begin graining with the greatest care, and use the smallest quantity at first.

6. If a ewe loses her lamb, milk her daily for a few days, and mix a little alum with her salt.

7. Let no hogs eat with the sheep, by any means, in the spring.

8 Give the lambs a little mill feed in time of weaning.

9. Never frighten sheep if possible to avoid it.

10. Sow rye for weak ones in cold weather, if you can.

11. Separate all weak, or thin, or sick, from those strong, in the fall, and give them special care.

12. If any sheep is hurt, catch it at once and wash the wound, and if it is fly time, apply spirits of turpentine daily, and always wash with something healing. If a limb is broken, bind it with splinters tightly, loosening as the limb swells.

13. Keep a number of good bells on the sheep.

14 Do not let the sheep spoil wool with chaff or burrs.

15 Cut tag-locks in early spring.

16. For scours, give pulverized alum in wheat bran; prevent by taking great care in changing dry for green feed.

17. If one is lame, examine the foot, clean out between the hoofs, pare the hoof if unsound, and apply tobacco with blue vitriol boiled in a little water.

18. Shear at once any sheep commencing to shed its mool, unless the weather is too severe, and save carefully the pelt of any sheep that dies.

19. Have, at least, some good work by to refer to. This will be money in your pocket.

The Great National Horse Fair.—The Eighth National Exhibition of Horses, at the National Park, Kalamazoo, Michigan, will be held August 15th, 16th, 17th and 18th, 1871. Premiums $30,000. Address Frank Little, Secretary, Kalamazoo, Mich. The *Michigan State Fair* s to be held on the same grounds, commencing September 9th, 1871.

THE DEPARTMENT OF AGRICULTURE.

Resignation of the Commissioner of Agriculture--Letters of the President and General Capron--Resignation of Professor Anderson.

Hon. Horace Capron, Commissioner of Agriculture, has tendered his resignation, to take effect August 1. General Capron, some two months ago, entered into a contract with the Japanese Government, through the Commission sent to this country for the purpose of introducing into Japan the industrial ideas of American civilization. He is empowered to introduce models of agricultural and industrial machinery, even to the appliances of railroading. He will take with him a geologist, civil engineer, and other members of a corps of scientific and industrial investigators. The mission of General Capron tends to still more extensive operations in the future, and is regarded by the President and Cabinet as of very great importance, both to the United States and to Japan.

We append the letter of resignation and the acceptance of President Grant.

DEPARTMENT OF AGRICULTURE,
WASHINGTON, June 27, 1871.

To the President of the United States:

DEAR SIR: In fulfillment of an engagement with representatives of a foreign government, the nature and circumstances of which I communicated to you early in May last, it becomes necessary to tender my resignation as Commissioner of Agriculture, to take effect on the first day of August next. In doing so I desire to express my high appreciation of your confidence and kindness, officially and personally expressed, and I assure you of their indelible impression upon my mind and heart.

I have the satisfaction of leaving the Department in efficient working order; its buildings and improvements erected, without increasing the moderate annual appropriations; its finances unembarrassed; its current pecuniary obligations without, as heretofore, the necessity of deficiency appropriations, and an enlarged fund for the next fiscal year. Its usefulness has been satisfactorily tested not only in the exercise of its well-known public functions, but in answer to thousands of personal inquiries, involving every aspect of scientific agriculture, and tending to advance the public weal with private welfare; and its importance asserted in decided terms by industrial authorities, official and personal, of all quarters of the globe. I scarcely need ask from you a continuance of that intelligent appreciation and fostering care accorded hitherto, and essential to the full development and highest utility of this department of the national government.

I have the honor to be, your obedient servant,

HORACE CAPRON,
Commissioner of Agriculture.

EXECUTIVE MANSION, WASHINGTON, June 18, 1871.

Hon. Horace Capron, Commissioner of Agriculture:

DEAR SIR: Your letter of the 27th instant, tendering your resignation as Commissioner of Agriculture, is just received. Appreciating as I do the value of the Department over which you have so ably presided for years, to the country at large, I should regret receiving or accepting your resignation were it not for the importance attached to the new position which you are called on to fill, and which, no doubt, will be filled with credit and to the inestimable value of the nation which has secured your services.

In the new place, of which you have accepted the responsibilities, I predict results creditable to yourself and to the nation which has so honored you, as well as the *rapid* advance of commerce between that nation and all others. Such a result can not prove otherwise than beneficial to the world's interests, leaving out of the account that of ourselves as a single nation.

Your resignation is accepted from the date proposed by yourself, with anticipations that you will realize all that is expected from your new duties.

With sincere wishes for your future success I subscribe myself, very sincerely, your obedient servant,

U. S. GRANT.

Mr. Capron will receive a salary of $20,000 a year.

Professor Anderson, of the District of Columbia, chemist of the Agricultural Bureau, has resigned his position, and accepted the offer of the Japanese Government to accompany Mr. Capron as geologist of the expedition.

Professor Pool, of Pennsylvania, also joins the party as geologist and acting special engineer.

The *Daily Chronicle*, of Washington, D C., alluding to the resignation of Col. Capron, speaks of him and his foreign call, as follows:

"No gentleman in the public service has attracted a higher respect or a warmer regard among his associates and subordinates. The country at large, especially the agricultural interest, will share in their regrets, and will see in it another illustration of that wretched economy which refuses to adequately reward the services of able and conscientious officials. General Capron's salary has been less than that of many New York book-keepers, and has been entirely inadequate to his position.—His acceptance of a high mission from the Japanese Government, at a salary of $20,000 per annum, is universally regarded as the dictate of a proper self-respect. Such cases demonstrate the propriety of retaining the services of such men by the payment of proper salaries.

The mission to which General Capron has been called by the Japanese Government is not only one of high dignity, but also of incalculable influence in the present crisis of the world's civilization.—He is strongly endorsed by President Grant and his entire Cabinet. His task is nothing short of the reconstruction of Japanese productive industry.

This solicitation of an American official to preside over such a movement fully explodes the silly talk about the superiority of Oriental agriculture. The Japanese, the most intelligent and practical of Oriental nations, the Yankees of Asia, recognize the superiority of our progressive civilization, and desire to imitate it. They naturally look to the most progressive people in the world for the ideas of progress, and in order to get them, they import the brains that conceive them.

For two months past General Capron has been collecting models of agricultural, manufacturing and railroad machinery, and of all sorts of domestic furniture and equipment, illustrating all the phases of American life, business, social and domestic. One of the first results of this movement will be a great enlargement of our trade with Japan, and a great increase in our manufacturing operations, especially agricultural implements and machinery.

The ultimate consequences who can tell? Civilization in its westward progress has now belted our Northern hemisphere. What will become of the stereotyped Oriental nations when once it leaps the Pacific and sets foot upon the soil of Asia? Will they waste away before it like our own aborigines? The history of China and India, during the last three hundred years, might seem to warrant this supposition. The Japanese nation has apparently learned this lesson and is fortifying against it. Instead of allowing itself to be crushed by the march of progress it proposes to keep step with it. Humanity will wish it abundant success."

Ladies Department.

ALICE CARY'S BEST POEM.

Of all the beautiful pictures
That hang on Memory's wall
Is one of a dim old forest,
That seemeth best of all;
Not for its gnarled oaks olden,
Dark with the mistletoe;
Not for the violets golden
That sprinkle the vale below;
Not for the milk-white lilies
That lean from the fragrant hedge,
Coquetting all day with the sunbeams,
And stealing their golden edge;
Not for the vines on the upland,
Where the bright red berries rest,
Nor the pinks, nor the pale, sweet cowslip.
It seemeth to me the best.

I once had a little brother,
With eyes that were dark and deep—
In the lap of that olden forest
He lieth in peace asleep;
Light as the down of the thistle,
Free as the winds that blow,
We roved there the beautiful summers,
The summers of long ago;
But his feet on the hills grew weary,
And one of the autumn eves
I made for my little brother
A bed of the yellow leaves.

Sweetly his pale arms folded
My neck in a meek embrace,
As the light of immortal beauty
Silently covered his face;
And when the arrows of sunset
Lodged in the tree-tops bright
He fell, in his saint like beauty,
Asleep by the gates of light.
Therefore, of all the pictures
That hang on Memory's wall,
That one of the dim old forest
Seemeth best of all.

FARMERS' FAMILIES.

Much has been said and written on this subject; poets have loved it, and almost every artist has his cozy little farm-house, nestled among the trees, covered with climbing-roses and surround by all the "necessary outbuildings." Many a time have we forgotten while gazing at such a picture, or reading one of these amorous effusions, that we were born in the country, that we lived in a farm house and followed its tiresome monotony from morning till night, varying from laundry to dairy, feeding the poultry, raising before the lark was astir to milk the "patient kine," "shod like a mountaineer," and so on with but little variation, save on those days in which there was house-cleaning or some other "extra job" to be done.

Then when evening came and we sat down thoroughly wearied, what an unutterable longing came over us for something more, if, (and the tantalizing picture would present itself,) there was only a paper to be picked up after this was over, or some interesting or instructive volume—we were weary, very weary, the very sight of the pile of patching made both fingers and eyes ache—we were disinclined to touch it.

And just here is one of the great wants of our modern farm-houses,—there will be found if the case be investigated, that in by far the largest proportion of them there is but the one weekly paper, and in very many none at all. In these houses the library may be easily counted. And here men and women in embryo spend those years that will so much influence their future lives. Let this be remedied. Let the fathers supply their children with those grand educators, the public press. Gather around their fireside the classic author and mingle with them the best poets and some well-assorted novels, and thus inaugurate a new era in our farm-houses which will make home more attractive to the sons than the "corner grocery," and the wives and daughters will have something to amuse and *rest* them after the cares of the day.—*Cor. Germantown Telegraph.*

SOME REMARKS ON BREAD-MAKING.

As your correspondents are discussing the question of Bread-Making, allow me to offer the following remarks:

I never use a tin or metal ware of any kind to mix bread in. I prefer a wooden bowl and spoon, because they can always be kept clean and sweet. A still better thing is a yellow nappy, and it can be dipped into hot water before setting the dough in it.

As to the use of saleratus and soda, it is only tolerated by the grossest ignorance. It is the received impression that an alkali makes the bread tender, and it is indiscriminately used, hence so much yellow looking bread. These alkalies are only of service when an acid is to be neutrrlized, and then they are to be very sparingly used. It is very difficult to enlighten an ignorant cook, whose obstinacy is in proportion to her ignorance, and whose threat of leaving, if not left undisturbed in her kitchen, frightens her timid, delicate mistress into silence and absence. How few mistresses there are who are able to contend with these kitchen autocrats, or are competent to prove their ablility to execute what they have undertaken?

Let an old housekeeper read what has been written, and she will cry out, "La, what a fuss about bread making, which any ninny can do!" And if she has a batch of good bread once in a fortnight, and that by good luck, as she would call it, she thinks she knows all about the matter, and disdains to give attention to such a trifle. Yet, if you ask her why her bread was not habitually good, she cannot explain, otherwise than that the leaven was overworked, the yeast not good, the water too hot, or the flour was bad; but the true rationale she is unable to explain, yet she knows all about making bread. If you were to attempt to enlighten her, she would silence you by "thanking her stars she never meddled with such kinds of knowledge."

The question is asked if the use of soda, cream of Tartar and saleratus be as unhealthy as many now assert, and why? Ure says the most clebrated writers upon bread-making give the preference to bread mixed with yeast and well kneaded. The pre-eminence of the Parisian bread is owing to this.—*Cor. Germantown Telegraph.*

MAKING GOOD COFFEE.

The making of good coffee is a rare thing in this country: most persons boil it, thus making a decoction instead of an infusion; this effectually gets rid of the delicate and agreeable aromatic flavor, and leaves a comparatively tasteless beverage. The following particulars will be found worth attention:

Never buy your coffee ground, but grind it yourself, immediately before using it; keep your coffee pot, whatever kind you may use, wiped clean and dry inside; a damp tea or coffee-pot acquires a musty flavor that spoils the best tea or coffee. The cheapest and perhaps the best coffee-pots are those made on the *French plan*, called cafetieres. If you have not one of these, adopt the following plan: Put your freshly grounnd coffee into the coffee-pot, previously made warm, and pour upon it water actually boiling; set the pot by the side of the fire for a few seconds, but do not let it boil up, then pour a cupfull out and return it back again to the pot in order to clear it; having done this let it stand on the hob or centre to settle, and in less than five minutes a transparent, strong, aromatic cup of coffee may be poured out. The proportions of coffee (which should not be too finely ground) recommended, are an ounce to a pint or pint and a half of water.

The milk used with coffee should always be boiled and used as hot as possible; the boiling of milk imparts a peculiar and exceedingly pleasant flavor to the coffee. White sugar is recommended as the molasses-like flavor of moist sugar quite overpowers the delicate aroma.—*Cor. Germantown Telegraph.*

TEARS.

There are sacred drops,
Which do not rise,
Quick, gushing to the eyes;
But oozing inward,
Silent, dark and still,
Like some cavernous rill,
That falls congealing,
Turning into stone,
The things it falls upon.

A good man, who has seen much of the world, and is not tired of it, says: "The grand essentials to happiness in this life are, something to do, something to love, and something to hope for."

USEFUL RECIPES.

MARES LOSING THEIR COLTS.—Fright and excitement are frequent causes of abortion in timid and nervous mares. The sudden appearance of strange and noisy objects, and disagreeable strong odors of animal matter are to be avoided. Also fast riding, driving and overloading.

TICKS ON SHEEP.—Take oil of turpentine, four parts; olive oil, twelve parts; Creasote, one part. Mix well, and apply along the body, parting the wool. Too much should not be applied at one time.

CATARRH OR COLD IN THE HEAD IN COWS.—The treatment of simple catarrh is more a matter of nursing than medicine. The animal should at once be removed to a good airy box, and the diet restricted to mashes and soft food; a gentle cathartic may be given: Epsom salts, eight ounces; powdered ginger, two drachms. Mixed in a quart of warm gruel, and administered as a drench. The fever, often present, will be relieved by dissolving a little nitre in the water. This, with good nursing and attention to the animal's wants, will generally effect a cure.

LOSS OF HAIR.—Try the following preparation: Take of quinine, eight grains; powdered nutgalls, ten grains; glycerine, half an ounce; oil of almond, one ounce; oil of lavender, twenty drops—mix thoroughly and have a little rubbed over the surface of the denuded skin every third or fourth day.

FISTULA IN HORSES.—Sometimes an abscess does not easily discharge its contents, but communicates with the surface by a narrow canal, with walls of a membrane similar to that inclosing the pus, containing besides, in cases of long standing, hard fibrous tissue, and secreting a thin, serious, and often badly smelling pus This is a sinus, which where it becomes constricted at its external orifice, is termed a fistula, such as occurs in poll evil, bad cases of quittor, &c. Inject by means of a small syringe, two drachms of tincture of iodine, once daily, for a few days. Then, and until the fistula is healed, inject daily a small portion of a solution of carbolic acid; proportion of solution to be half an ounce of carbolic acid to a pint of soft water; to be shaken before use. Keep the sore clean, and the opening from closing too early, by placing a small piece of cotton in the mouth of the opening.

FILM IN THE EYE OF CATTLE.—As a remedy for film on an animal's eye, get burnt alum: Pound and rub the alum into a powder, making it as fine as flour. Fill a common goose quill partly full with it, and from that blow it into the eye. But if the eye is bruised by a blow, that is another matter, and the alum would probably do no good.

BLOWN IN SHEEP.—Take Glauber's salts, one ounce, and dissolve in peppermint water, four ounces; to this add tincture of ginger, a drachm; tincture of gentian, a drachm; boiling water an ounce. This should be given every six hours, until the bowels are opened, and half the quantity on each of the four next mornings.

REMEDY FOR LICE.—A correspondent states that for some years his chickens have been kept free from lice by strewing small branches or sprays of cedar about the hennery. Previous to the use of this simple remedy, they were badly infested. No whitewashing or other means to expel vermin have been used.

KICKING COWS.—Tie a rope around the hind foot, near the hoofs with a slip-knot, for the convenience of untying. Make the other end of the rope fast around the under jaw, with the foot drawn a little down. Then make her kick, until she will raise the foot and replace it without a kick, which will be in a few minutes, and the cure is complete. The plan is equally efficacious with horses and other frisky creatures. Let milkers and others fully test this safe and effectual remedy, and I am satisfied they will neither need or use any other.

HORSES PAWING.—It may be prevented by fastening a piece of chain eighteen inches long to the foot while the horse is in the stable. If the horse is in the habit of raising both feet, fasten a chain to each. If this is a sure remedy, it can be easily applied by slipping a small strap through the end link of the chain, and buckling it around the limb of the horse beneath the fetlock joint. The benefit of this doubtless arises from the chain striking the leg when the foot is thrown forward for pawing.

SETTING HENS.—Setting hens can be cured by putting water in a vessel to the depth of one inch, putting the hen into it, and covering the top of the vessel for twenty-four hours. The vessel should be deep enough to allow the fowl to stand up. This is the best remedy I have ever tried.—From the *American Stock Journal.*

DOMESTIC RECIPES.

SENATOR WILSON'S WAY OF MAKING BLACKBERRY WINE: Measure your berries and bruise them; to every gallon adding one quart of boiling water. Let the mixture stand twenty-four hours; stirring occasionally; then strain off the liquor into a cask, to every gallon adding two pounds of sugar, cork tight, and let it stand to the following October, and you will have wine ready for use, without further straining or boiling.

SENATOR HENKLE'S WAY: Take 100 quarts of blackberries, crush them and press out the juice. Then dissolve 110 lbs white sugar in 20 gallons cold water. Measure the syrup; add the juice, and as much more water as will be required to make 40 gallons in all. If you want to make a smaller quantity preserve the above proportions. After putting it in the cask (one that has recently had whiskey is preferred,) set it in the cellar or other cool place with the bung open to the air until Christmas. Then stop tightly or bottle it. —*Marlboro Gazette.*

BLACKBERRY CORDIAL.—To two quarts of juice add one pound of white sugar; half ounce nutmeg; half ounce cloves pulverized. Boil all together for a short time, and when cold add a pint of brandy.

This syrup is said to be almost a specific for summer complant or diarrhœa. From a teaspoonful to a wine-glass is to be taken, according to the age of the patient, until relieved. It has been made and successfully tried in the family of the Editor of the *Marlboro Gazette* for many years.

CURRANT WINE.—To a quart of juice add three quarts of water and four pounds of sugar, brown or white.

ANOTHER.—Two quarts of juice and two quarts of water, to which add four pounds of white sugar. Mix all, and put it in a nice keg, where it had better remain a year, though it is very good to use in six months.

FRUIT JAMS.—It is general known that boiling fruit for a long time and *skimming it well without the sugar* and *without a cover* to the preserving pan, is a very economical and excellent way—economical because the bulk of the scum raises from the *fruit* and not from the *sugar*, if the latter is good; and boiling it without a *cover*, allows the evaporation of all the watery particles therefrom; the preserves keep firm and well-flavored. The proportions are three-quarters of a pound of sugar to a pound of fruit. Jam, made in this way, of currants, strawberries, raspberries or gooseberries is excellent.—*Cor. Germantown Telegraph.*

RED CURRANT JELLY.—The following recipe for making this jelly I have used for several years, and think it much better than any other I have tried or seen recommended:

Put your currants in a bell-metal kettle and scald them well; when cool press them through a sieve, getting out all the juice, (be careful not to allow any skin or seeds to pass through the sieve,) measure the juice and put it back again in the kettle and let it boil hard for five or six minutes, skimming it well; then add while on the fire boiling one pound of sifted loaf sugar to every pint of juice; stir it till dissolved and then it is done and ready to put in the tumblers. It tastes much more of the fruit and is a beautiful light color.—Will keep for years if necessary.—*Cor. Germantown Telegraph.*

BEEF-TEA FOR INFANTS.—Cut the steak very fine, put it in a bottle and stop very tight; set the bottle in a kettle of cold water and let it boil three hours. Then drain off the tea and salt to taste. One pound of steak will make a cupful of tea. This is not only good for infants, but it is a most nourishing food for the sick.

NEW ADVERTISEMENTS.

T. Newton Kurtz.....	*American Manures, and Farmers' and Planters' Guide.*
Spear Brothers.....	*Lightning Peach Parer.*
Blymer, Norton & Co.....	*Evaporators and Mills.*
Colwells, Shaw & Willard..	*Tin-Lined Lead Pipe.*
J. M. Thorburn & Co.....	*Turnip Seed.*
Ingersoll & Dougherty.....	*Cotton and Wool Presses.*
B. H. Robb.....	*Pure Bred Pigs.*
N. F. Burnham.....	*New Turbine.*
Merchant & Co.....	*Asphaltic Roofing Felt.*
L. J. Worrall & Co.....	*Fruit Preserving Powder.*
Hudson River Wire Works..	*Wire Clothes Line.*
Girard Wire Mills.....	*Wire Clothes Line.*
Walton, Whann & Co.....	*Super-Phosphate.*
Jesse Haney & Co.....	*Books.*
E. Moody & Sons.....	*Fruit Trees.*

A VISIT TO THE MARYLAND AGRICULTURAL COLLEGE---ADDRESSES BY VISITORS, &c.

Upon the invitation of the president of the board of trustees, Allen Bowie Davis, Esq., a number of gentlemen interested in education, paid a visit on Wednesday, May 24th last, to the Maryland Agricultural College, located twenty eight miles from Baltimore, near the Washington railroad. Upon the arrival of the visitors, they were met by the president of the faculty, Rev. Dr. Samuel Regester, and the professors. The students, in full military uniform of cadet grey, were drawn up in front of the institution to receive the guests. After witnessing a battalion drill and dress parade of the students, which were admirably executed, under the command of Major Francis A. Soper, they entered the hall of the college, where the guests were formally welcomed by President Davis and the faculty of the college, all the students being present.

The president observed that having found that the position of the Agricultural College was not generally known, he had invited a number of gentlemen to accompany the trustees and himself on their present visit. He complimented the students upon their proficiency in the military drill, and remarked to the guests that he was himself a man of peace, and that the exercises in arms were in obedience to the law of Congress making an appropriation of land scrip to the college upon the condition that military tactics should be taught therein. The annual revenue of the college from the donation of the general government amounted to $6,000 per year. He then introduced to the students, after many complimentary remarks, George Wm. Brown, Esq., of Baltimore city.

Mr. Brown said he was also a man of peace, but he believed in the necessity of military organizations. The time comes to individuals as well as nations when men must throw themselves upon their own manhood and fight it out to the end. If that time ever comes it will stand them in good stead, and if it never comes, they will find that military discipline teaches many valuable things. Self respect, dignity, order and graceful bearing are the results of military training. He could tell by the personal bearing of those he met in the streets whether they had borne arms in the recent civil contest. But he could assure them of this fact, that while the world lasts the qualities which distinguish the true soldier will be held in respct by mankind—endurance, fortitude, the resolve to risk everything, even life itself, for the sake of a cause. Mr. Brown, in concluding, referred to the various college studies, and remarked that in these different branches employed in forming and developing and disciplining the mind much will be forgotten, but, like the scaffolding around a grand building which will fall, the building will stand.

President A. Bowie Davis spoke of his own efforts while a member of the State Constitutional Convention, in 1851, to have engrafted upon the State constitution the recognition that agriculture should receive the fostering care of the State, a feature which has been renewed in successive constitutions to the present day. He also spoke of the condition of agriculture in this and other States, and then introduced one of the benevolent merchants and respected and honored philanthropists of Baltimore, Francis T. King.

Mr. King confined himself to some practical talk upon industrial education, and said we are eminently a practical people, but we have one deficiency. We are not systematic enough, not detailed enough. An American will fly from one pursuit to another, and turn his hand to whatever presents itself. But the increase of population, the subdivision of labor and consequent competition in all pursuits, now compel us to acquire excellence in our respective callings. Agriculture was considered a pursuit that every man could follow who could perform manual labor. He then gave an account of the wonderful results of the labors of the Society of Friends of Baltimore, by whom the speaker was deputed to look after the interests of their people in North Carolina. The whole material, intellectual and moral improvement accomplished there was the result of a systematic plan of operations. He had collected $112,000 for their relief, and all but $20,000 has been expended for education and agriculture. From six to ten thousand persons have been educated in a quiet way.

President Davis then introduced Robert T. McKay, formerly a large planter of Alabama, now residing on Eutaw Place, Baltimore, who spoke for an hour in a very able and interesting manner upon the subject of agriculture in the Southern States, the social characteristics and condition of its people formerly and at the present day. His remarks highly entertained and amused his audience, and contained much interesting information, which want of space obliges us to omit.

At the conclusion of the addresses, which occupied over two hours, the visitors were conducted over the farm and witnessed the many improvements which had been made under the present administration. There are 130 students upon the roll of the college, of whom eighty are State pupils. The company, after dining, returned to the city, highly gratified with their visit.

A Splendid Offer.—We have just received the beautiful Chromo, "ISN'T SHE PRETTY," offered as a premium to each subscriber to Demorest's Monthly Magazine, and we are safe in saying, that our readers would be pleased with the Chromo if they had paid the full retail price, $8 for it. It is a pleasing subject, a fine work of art, and certainly worth more than twice the cost of the subscription. Every person should secure this splendid Parlor Picture which is sent by mail post free, and with it a year's subscription to Demorest's Model Parlor Magazine for only $3.00.

Address W. JENNINGS DEMOREST, 838 Broadway, New York City.

The Cherokee County Agricultural Fair.—We have received the Premium List, Rules and Regulations for the Third Exhibition of the Agricultural Fair Association, for Cherokee, Georgia and Alabama, to be held near Rome, Floyd county, Georgia, beginning the 10th day of October, to continue four days. Premiums offered for the various classes are of a liberal character, and the names of the gentlemen at the head of officers, is a guarantee as to its success. Parties interested can address B. F. Jones, Secretary, Rome, Georgia.

Virginia Horticultural and Pomological Society.—The Fifth Annual Exhibition of this Society, in connection with the thirteenth session of the American Pomological Society, will be held at Assembly Hall, Richmond, Va., on the 6th, 7th and 8th of September, 1871. The premium list is liberal, and every arrangement made to secure a large and successful exhibition. The indications are that it will be one of the largest display of fruits ever held in the United States. Address H. K. Ellyson, Sec. Va. H. and P. Society, Richmond, Va.

AMERICAN POMOLOGICAL SOCIETY.

At a recent meeting of the Norfolk Pomological and Horticultural Society held at the residence of Gen. R. L. Page, near Norfolk, Captain James Hope, offered the following, which was adopted :

Whereas, The next biennal session of the American Pomological Society is to be held in Richmond on the 6th, 7th and 8th days of September next; and

Whereas, Its meeting will be attended by scientific and practical pomologists from all parts of the North and West, including the Pacific slope; and

Whereas, the South can boast vast regions which produce the apple, the pear, the grape, the orange, the fig, the lime and other valuable fruits, both of the temperate and tropical zones; and

Whereas, both for the entertainment of our friends from abroad, and the full display of our rare and abundant products, we should all unite in a vigorous effort to secure the success of the next biennial meeting of the aforesaid American Pomological Society, therefore be it

Resolved, That we request all kindred organizations throughout Virginia and her sister States of the South, to co-operate with the Richmond Society in making the exhibition a success in all its departments.

Resolved, That as an earnest of our unaffected interest in the approaching meeting, we pledge ourselves to co-operate with our friends in Richmond to the best of our ability, and the extent of our resources in their efforts to illustrate the pomology of the South.

Resolved, That the editors of the South be and hereby are, requested to urge upon their readers the material importance of making the approaching session of the American Pomological Society a complete success, by which means, in our judgment they will render a substantial service not only to our own section, but to the cause of science and the interests of the country at large.

The Manufacturer and Builder.—The July number of this popular industrial periodical contains a plentiful array of attractive engravings, and a goodly store of entertaining and instructive reading matter, including articles from the pens of Elihu Burritt, Prof. Van der Weyde, and other eminent men. Among the subjects treated, we may mention as especially noteworthy, the Reservoir of the Bombay Water Works—a magnificient structure, displaying great engineering and architectural skill, to which a full-page engraving is devoted; An Improved Method of Coupling Cars Automatically. Heating by the Sun's Rays, and two tasteful designs with plans and estimates of construction of country residences; the Best Form of Cold Chisels, The Lathe, Decay and Preservation of Building-Stone. The Relative Value of Electro-Magnetism and Steam as Motive Powers, Machinery and Machine Shops, Modern House building, Answers to correspondents, Problems, and numberless other articles may of them illustrated, go toward making this number one of the most attractive that we have ever seen. Published monthly, by Western & Company, 37 Park Row, New York, at $1.50 a year.

CUTTING CORN STALKS.

Nearly every winter or spring I notice in the agricultural papers inquiries for, or advertisements of corn stalk cutters. Now almost every farmer in the West who has much of a stalk field to plow has an implement at hand that answers every purpose as well, if not better than the best stalk cutters made for that use. I refer to a good large forty tooth harrow. All that is wanting is to know how to use it, and I will tell you how I have done it for several years, and like it the best of any way I have tried or seen, to prepare the stalks for plowing under. Select the first and every real dry, sunny day (till the work is done), and not before nine or ten o'clock, or when the stalks are perfectly dry and brittle, I put three horses, if I have them, before the harrow, and as much weight on top of it as they will walk off lively with without worrying them; pass over two rows of stalks. (It is immaterial whether it is the same way I intend to plow or not). At the end turn around and go back over the same two rows and you will find them broken and crumbled up finer than any cutter with knives will do it, and what is of more consequence than the fineness, is that most of the stalks will be broken from the roots at the surface of the ground which is much better than if even a few inches of stalks adhere to the roots. If but two horses are used, it works better to spread them so that they will straddle the two rows instead of one. This is done by splicing or lengthening in some way the inside reins about two feet four inches. A long evener is better but not indispensable. Remember to operate only when the stalks are perfectly dry, and the drier and firmer the ground the better, so as to hold the roots, instead of their being drawn out of the ground by the harrow. Those who have used stalk cutters know that the best of them do not work satisfactorily only in like conditions of perfect dryness. The sharper your harrow teeth the better, for this as well as all other work.—J. B. Morse, *in American Farm Journal.*

Mildew on Roses.—A correspondent of the *Cottage Gardener* gives the following cure for mildew on roses: Rub down in a gallon of soft water one pound of soft soap; with the solution syringe the upper and under surface of the foliage, and the mildew will disappear as if by magic.

American Manures, and Farmers' and Planters' Guide.—This book contains a description of the elements and composition of plants and soils—the theory and practice of composting—the value of stable manure and waste products, &c.,—also, chemical analyses of the principal manufactured fertilizers—their assumed and real value—and a full expose of the frauds practised. By Jas. Bennett Chynoweth and Wm. H. Bruckner, Ph. D. Sold by T. Newton Kurtz, Baltimore—price $1.50—who has on sale a large variety of books on agriculture, horticulture, &c.

PREMIUM LIST

OF THE

THIRD ANNUAL FAIR

OF THE

MARYLAND STATE

Agricultural and Mechanical

ASSOCIATION,

AT THEIR FAIR GROUNDS, PIMLICO, NEAR BALTIMORE,

TO COMMENCE TUESDAY, OCT. 3, 1871, AND CONTINUE FOUR DAYS.

CLASS A.---CATTLE.

Gen. GEO. S. BROWN, Superintendent.

Herd Premiums.

[A herd to consist of 1 Bull and 4 Cows, or Heifers in Calf.]

For the best Short Horn Herd,	$75
Devon "	75
Alderney, Jersey or Guernsey,	75
Hereford	75
Ayrshire	75

The Awarding Committee on each breed of cattle will constitute the Awarding Committee on the Herd of that Breed.

Sweepstakes.

For the best and largest Herd of any pure breed not less than ten, owned by the exhibitor, Diploma and $75.

Awarding Committee.—Dr. Ben. Woods, Chm'n, Hon. Jas. T. Earle, J. Howard McHenry, Capt. Thos. Love, Hon. R. B. Carmichael.

Imported Cattle.

[Under this head is included Calves dropped in the United States, but which were "*in utero*" when their mothers were imported]

For the best Short Horn Bull, Diploma and	$40
" " Devon Bull, "	40
" " Alderney, Jersey or Guernsey, "	40
" " Hereford, "	40
" " Ayrshire, "	40
" " Short Horn Cow or Heifer, "	30
For the best Devon Cow,	$30
" " Alderney, Jersey or Guernsey,	30
" " Hereford,	30
" " Ayrshire,	30

Awarding Committee.—Col. Edward Wilkins, Chm'n, Dr. Ben. Woods, Baltimore Co., Robert Moore, Baltimore City, Jos. H. Bradley, Washington City, Amos E. Kapp, Pa.

Short Horns.

For the best Bull 3 years old,	$40
2d do do	25
For the best Bull between 2 and 3 years old,	20
2d do do	15
For the best Bull between 1 and 2 years old,	20
2d do do	15
For the best Bull Calf,	10
For the best Cow 3 years old,	30
2d do do	20
For the best Heifer between 2 and 3 years old,	20
2d do do	15
For the best Heifer between 1 and 2 years old,	10
For the best Heifer Calf,	10

Awarding Committee —Hon. Jas. T. Earle, Chm'n, Clement Hill, Prince George's Co., John Harrington, Talbot Co., Col. Rich'd Dulaney, Va., C. W. Burnell, Frederick Co.

Devons.

For the best Bull 3 years old, $40
2d do do 25
For the best Bull between 2 and 3 years old, 20
2d do do 15
For the best Bull between 1 and 2 years old, 20
2d do do 15
For the best Bull Calf, 10
do Cow, 3 years old, 30
2d do do 20
For the best Heifer between 2 and 3 years old, 20
2d do do do 15
For the best Heifer Calf, 10
For best Heifer between 1 and 2 years old, 10

Awarding Committee.—J. Howard McHenry, Chm'n, Wm. Colder, Pa., Chas. E. Coffin, Prince George's Co., Geo. Blight, Pa., Capt. E. L. F. Hardcastle, Talbot Co.

Alderneys, Jerseys or Guernseys.

For the best Bull 3 years old, $40
2d do do do 25
For the best Bull between 2 and 3 years old, 20
2d do do do do 15
For the best Bull between 1 and 2 years old, 20
2d do do do do 15
For the best Bull Calf, 10
For the best Cow 3 years old, 30
2d do do 20
For the best Heifer between 2 and 3 years old, 20
2d do do do 15
For the best Heifer Calf, 10
For the best Heifer between 1 and 2 years old, 10

Awarding Committee.—Capt. Thos. Love, Chm'n, Baltimore Co., Geo. B. Milligan, Baltimore City, Geo. E. Waring, Jr., Rhode Island, R. S. G Baker, Baltimore City, Col. Geo. R. Dennis, Frederick.

Herefords.

For the best Bull 3 years old, $40
2d do do 25
For the best Bull between 2 and 3 years old, 20
2d do do do 15
For the best Bull between 1 and 2 years old, 20
2d do do do 15
For the best Bull Calf 10
do Cow, 3 years old, 30
2d do do 20
For the best Heifer between 2 and 3 years old, 20
2d do do do do 15
For the best Heifer Calf, 10
For the best Heifer between 1 and 2 years old, 10

Awarding Committee.—Hon. R. B. Carmichael, Chm'n, Col. John Sothron, St. Mary's Co., Robert Moore, Baltimore Co., S. K. George, Jr., Howard Co., Charles L. Rogers, Baltimore Co.

Ayrshires.

For the best Bull 3 years old, $40
2d do do 25
For the best Bull between 2 and 3 years old, 20
2d do do do do 15
For the best Bull between 1 and 2 years old, 20
2d do do do do 15
For the best Bull Calf 10
do Cow 3 years old, 30
2d do do 20
For best Heifer between 2 and 3 years old, 20
2d do do do do 15
For the best Heifer Calf, 10
For best Heifer between 1 and 2 years old, 10

Awarding Committee—Hon. J. Merryman, Chm'n, Samuel J. Sharpless, Pa., Dr. George R. Dennis, Somerset Co., Hamilton Caughey, Baltimore city, Wm. M. Knight, Cecil Co.

Grades or Natives.

For the best Cow, $30
2d do 20
For the best Cow or Heifer between 2 and 3 years old, 10
2d do do do do 5
For the best Cow or Heifer between 1 and 2 years old, 10
2d do do do do 5
For the best Calf, 5

Awarding Committee.—Anthony Johnson, Howard Co., Samuel Wilhelm, Baltimore city, B. Jones Taylor, Worcester Co., Dr. J. L. Adkins, Talbot Co., Milton A. Parsons, Wicomico Co.

Fat Cattle.

For the best Beef on hoof, bred and fattened in the State and owned by the Exhibitor 3 months previous to exhibition, $25
For best Beeves, not less than three in number, 25

Awarding Committee.—Colonel Levin Woolford, D. C. Blackiston, Kent Co., E. H. Moon, Baltimore city, S. T. C. Brown, Howard Co., Joshua Motter, Frederick Co.

Working Oxen.

For the best Yoke, $30
2d do do 20
3d do do 10

Awarding Committee—Hon. O. C Hammond, Chairman, Richard Cooke Tilghman, Queen Anne's Co., John W. Jenkins, Charles Co., Dr. C. H. B. Massey, Kent Co., Charles Harrison, Baltimore Co.

Class B.

HORSES.

J. L. JOHNSTON, Superintendent.

Blooded Horses.

[The Pedigree must be satisfactory to the Awarding Committee.]

For the best Thoroughbred Stallion, Diploma and $100.
2d do do do 50
For the best do do Mare 50
2d do do do 25
For best Horse Colt, 3 years old, Diploma and 50
2d do do do 25
For the best do 2 years old, Diploma and 25
2d do do do 15
For the best Horse Colt, 1 year old, Diploma and 20
2d do do do 15
For the best sucking Horse Colt, 5
For the best Filly, 3 years old, 30
2d do do 20
For the best Filly, 2 years old, 15
2d do do 10
For the best Filly, 1 year old, 10
2d do do 5
For the best sucking Filly, 5

Awarding Committee—Col. John R. Emory, Chairman, Col. H. G. S. Key, St. Mary's County, Severn Eyre, Va., —— Sanford, New York, J. D. Ferguson, Baltimore city.

Quick Draft Horses.

For the best Stallion,	Diploma and $100
2d do	50
For the best Mare,	50
2d do	25
For best Horse Colt, 3 years old,	Diploma and 50
2d do do do	25
For the best Horse Colt, 2 years old,	Diploma and 25
2d do do do	15
For the best Horse Colt, 1 year old,	20
2d do do do	10
For the best sucking Horse Colt,	15
For the best Filly, 3 years old,	30
2d do do	20
For the best Filly 2 years old,	15
2d do do	10
For the best Filly, 1 year old,	10
2d do do	5
For the best sucking Filly, Geldings or Mares,	5
For the best Pair of Horses, raised by exhibitor,	Diploma and 50
For best quick draft brood Mare, in foal or with foal at foot,	25
For best quick draft Gelding,	25

Awarding Committee.—Col. Edw'd Lloyd, Chm'n, Capt. Arthur W. Chichester, Loudon Co., Va., Walter Brooks, Baltimore city, John A. Dorsey, Howard Co., Christian Devries, Baltimore City, Wm. H. Oler, Baltimore city.

Horses for General Utility.

For the best Stallion,	Diploma and $50
2d do	25
For the best Brood Mare,	30
2d do do	15
For the best pair matched Coach Horses,	50
2d do do do	25
For the best pair matched Coach Horses raised by the exhibitor,	50
For the best Gentleman's Saddle Horse, Mare or Gelding,	30
2d do do do	15
For the best Lady's Saddle Horse, Mare or Gelding,	30
2d do do do	15
For the best Boy's Pony, not exceeding 13½ Hands,	20
2d do do do	10

Awarding Committee.—Henry E. Johnston, Chm'n, Robert Renwick, Baltimore city, J. G. Morris, Talbot Co., John Lee Carroll, Howard Co., Frank M. Hall, Prince George's Co., R. Stockett Matthews.

Heavy Draft Horses.

For the best Stallion,	Diploma and $50
2d do	25
For the best Mare,	30
2d do	15
For the best Horse Colt, 3 years old,	25
2d do do do	15
For the best do do 2 years old,	20
2d do do do	10
For the best do do 1 year old,	10
2d do do do	5
For best Filly 3 years old,	20
2d do do	10
For the best Filly 2 years old,	15
2d do do	5
For best Filly 1 year old,	10
For best Team, not less than 4,	30
For best Pair,	15

Awarding Committee.—Sam'l Shoemaker, Chm'n, S. T. C. Brown, Carroll Co., R. Hammond, Anne Arundel Co., Walter Dorsey, Howard Co., Col. Thos. Hughlett, Talbot County.

Imported Horses.

For the best Thoroughbred Stallion,	Diploma and $100
2d do do do	50
For the best Thoroughbred Mare,	50
2d do do do	25
For the best Stallion, Heavy Draft,	Diploma and 100
2d do do do	50
For the best Mare, do do	50
2d do do do	25

Awarding Committee.—E. L. F. Hardcastle, Chairman, Hon. J. C. Clarke, Frederick County, Jas. D. McLane, Baltimore city, Jesse Tyson, Baltimore city, F. J. Henry, Dorchester County.

Sweepstakes for Stallions and Mares.

For that Stallion in any class of whose get the greatest number of superior colts, (not less than seven) shall be exhibited,	$50 and Diploma.
For the best Mare of any get showing the greatest number of superior colts, (not less than five)	$25 and Diploma.

Awarding Committee.—Col. J. M. Ware, Va., J. Alfred Ritter, Frederick, Walter Brooks, Baltimore city, E. G. Ulery, Baltimore Co., T. A. Millis, Dorchester County.

Jacks, Jennets and Mules.

For the best American Bred Jack,	Dip. and $25
2d do do	15
For the best American Bred Jennet,	20
2d do do	10
For the best Imported Jack,	50
do do Jennet,	25
For the best pair of Mules,	20
2d do do	10
For the best Team of Mules, not less than 4,	40

Awarding Committee.—Hon. Barnes Compton, Chairman, J. C. Harper, Talbot Co., Hon. Thos. Lansdale, Montgomery Co., Joseph H. McGee, Baltimore city, Col. G. E. Austen, Dorchester County.

TRIALS OF SPEED.

To take place each day at 3 o'clock, P. M.

Under the direction of the following Committee: Louis McLane, J. L. Johnston, and Geo. P. West.

[An entrance fee of ten per cent. on Premiums will be charged, and must accompany the nomination.]

OCTOBER 3d--Tuesday.

First Day.

1st Premium, $500

For Horses that have never beaten 3 minutes: $350 to first, $100 to second, $50 to third.

2d Premium, $500

For horses that have never beaten 2 35 : $350 to first, $100 to second, $50 to third.

Awarding Committee.—Hon. Oden Bowie, John Lee Carroll, Howard Co , Henry E. Johnston, Col Sinn, Frederick, C. Oliver O'Donnell, Lewis Turner, Jr., Col. J. Stricker Jenkins, Jas. Hodges.

4th OCTOBER--Wednesday.

Second Day.

1st Premium, $500

For Horses that have never beaten 2.50, $350 to first, $100 to second, $50 to third.

2d Premium, Silver valued at $300

Double Teams mile and repeat, both horses owned by exhibitor.

1st Team. a Piece of Silver, valued at $200 donated by Geo. W. Webb & Co.
2d Team, a Piece of Silver valued at $100

Awarding Committee.—Col. Edw'd Lloyd, Talbot Co., H. D. G. Carroll, J. D. Ferguson, Wm. H. Graham, Walter Brooks, Joseph Dorsey, Barnum's Hotel, Sam'l Shoemaker, Wm. R. Devries.

5th OCTOBER--Thursday.

Third Day.

Hotel Premium, $700

Offered by the following Hotels : Barnum's Hotel, $250; Eutaw House, $250; Guy's Monument House, $100; Sherwood House, $100.

Free for all Horses owned in Maryland on Sept. 1st, 1871, excepting "Bashaw, Jr.," $400 to first Horse, $200 to second, $100 to third.

2d Premium, $500

For Horses bred and raised in Maryland : $350 to first, $100 to second, $50 to third.

Awarding Committee.—Hon. John Merryman, Robert Renwick, W. W. Glenn, Chas. K. Harrison, J. D. Gilmour, Eutaw House, F. H. Burns, W. H. Clabaugh, Guy's Hotel, C. E. Waters.

6th OCTOBER--Friday.

1st Premium, $75

For Racking Horses, to Saddle : $50 to first, $25 to second.

2d Premium, Silver valued at $150

For running Horses, Gentlemen Riders, single dash.

To first Horse, a Piece of Silver valued at $100
2d do do do do 50

Farmers' Race.

3d Premium, Silver valued at $100

Entrance fee five per cent. on Premiums.

Slowest Horse takes the premium. Competitors riding each others Horses.

Awarding Committee.—F. M. Hall, Prince George's Co., E. A. Clabaugh, Wm. M. Preston, Frederick Co., Wm. Young, Hamilton Caughey, Thos. Kensett, Jas. L. McLane, Alex. D. Brown, Brookland Wood.

All Horses must be eligible at the time of the closing of entries.

Three or more horses to enter, two to start. Any horse distancing the field will only be entitled to first premium ; should two or more horses be left in the same race they are to contend for Second Premiums.

Entrance money of horses proven ineligible, will be forfeited to the Association.

The above trials of speed to be mile heats, best three in five to harness, except when otherwise specified.

Entries to close 20th September, 1871.

Heats to be trotted alternately.

The above trials of speed to be governed by the rules of the National Association.

Class C.

SHEEP.

HENRY O. DEVRIES, Superintendent.

[*Long Wools* include Cotswolds or New Oxfordshires, Leicester or Bakewell and Lincolnshires.

Middle Wools include Southdowns, Shropshire downs, Viltshire or West Country Downs, and other Down breeds.

Fine Wools include French and Spanish Merinos and Saxony.]

IMPORTED SHEEP.

Long Wools.

For the best Buck, Diploma and $1
2d do 1
For the best Ewe, 1
2d do 1

Middle Wools.

For the best Buck, Diploma and $1
2d do 1
For the best Ewe, 1
2d do 1

Fine Wools.

For the best Buck, Diploma and $1
2d do 1
For the best Ewe, 1
2d do 1

Awarding Committee.—Col. Ramsey McHenry Chairman, William F. Preston, Frederick County Charles W. Mitchell, Queen Anne's County, William Dodge, Washington County, R. R. Vandever Harford County.

AMERICAN BRED SHEEP.

Long Wools.

For the best Buck, Diploma and $1
2d do 1
For the best pen of Ewes not less than 3, 1
2d do do do do 1
For best pen of Buck Lambs not less than 3, 1
do do Ewe Lambs do do 1

Awarding Committee.—Dr. G. R. Dennis, Chairman, C. J. Hall, Montgomery County, Robert S Todd, Worcester County, Col. John W. Mitchel Charles County, J: Carroll Walsh, Harford County

Middle Wools.

For the best Buck, Diploma and $15
2d do 10
For the best pen of Ewes not less than 3, 15
2d do do do do 10
For the best pen of Buck Lambs, do 10
do do Ewe do 10

Awarding Committee.—Henry Carroll, Chairman, James Sutton, Baltimore County, James W. Townsend, Montgomery County. John W. Martin, Talbot County, John Wethered, Baltimore County.

Fine Wools.

For the best Buck, Diploma and $15
2d do do do 10
For the best pen of Ewes not less than 3, 15
2d do do do 10
For best pen of Buck Lambs not less than 3, 10
do do Ewe do do 10

Awarding Committee—A. D. Brown, Chairman, Dr. W. H. DeCourcy, Queen Anne's County, Vivian Brent, Charles County, Col. W. D Bowie, Prince George's County, Daniel Fields, Caroline County.

Fat Sheep.

For the best live Mutton, Diploma and $10
2d do do 5
For the best Slaughtered Mutton, 5
2d do do 3

Awarding Committee—James D. Gilmour, Chairman, Col. Coleman, Baltimore City, Joseph Dorsey, Baltimore City Sterling Thomas, Baltimore City, Lewis Myers, Baltimore City.

Grades.

For the best pen Ewes not less than 3, Dip. and $10
2d do do do do 5
Best pen Ewe Lambs, not less than 3, 10
2d do do do do 5

Awarding Committee--Alexander Murdoch, Chairman, A. H. Barnett, Talbot County, J. W. Payne, Worcester County, Aquila B McCarty, Alleghany County, Hon. F. Stone, Charles County.

Class D.

SWINE.

C. E. COFFIN, Superintendent.

[*Large Breeds* includes Chester, Berkshire, Hampshire and their grades. *Small Breeds* include Neapolitan, Suffolk, Improved China, Essex, Chinese Mocha and their grades.

Large Breed.

For the best Boar over 2 years old, Dip. and $15
2d do do 10
For the best Boar between 1 and 2 years, 10
2d do do 5
For best Boar between 6 months and 1 year, 5
For the best Sow over 2 years, 15
2d do do 10
For the best Sow between 1 and 2 years, 10
2d do do 5
For best Sow between 6 months and 1 year, 5
For best lot of Pigs (not less than 5), not less than 6 months old, 10

Awarding Committee.—Philip T. George, Chairman, Thomas W. H. White, Wicomico County, Nathan M Hobbs, Howard County, John S. Bradley, Alleghany County, A. J. Mills, Caroline County.

Small Breed.

For the best Boar over 2 years old, Dip. and $15
2d do do do 10
For the best Boar between 1 and 2 years old, 10
2d do do do 5
For the best Boar between 6 months and 1 year 5
do Sow over 2 years old, 15
2d do do do 10
For the best Sow between 6 months and 1 year, 5
For the best lot of Pigs, (not less than 5) not less than 6 months old, 10

Awarding Committee.—Wm. P. Trimble, Chm'n., J. G. Harvey, Baltimore City, William Grason, Dorchester County, John N. Cheswell Frederick County, William B. Mathews, Charles County.

Class E.

Poultry and Other Birds.

A. BOWIE DAVIS, Superintendent.

No. 1.---Asiatic Fowls.

For the best Trio of Dark Brahmas, $2
2d do do do 1
For the best Trio of Light do 2
2d do do do 1
For the best Trio of Buff Cochins, 2
2d do do do 1
For the best Trio of Partridge Cochins, 2
2d do do do 1
For the best Trio of White Cochins, 2
2d do do do 1
For the best Trio of Black Cochins, 2
2d do do do 1

No. 2.---Dorkings and Spanish.

Best Trio of White Dorkings, $2
2d do do do 1
Best Trio of Gray do 2
2d do do do 1
Best Trio of Silver Gray Dorkings, 2
2d do do do 1
Best Trio of Black Spanish, 2
2d do do do 1
Best Trio of White Leghorns, 2
2d do do do 1
Best Trio of Dominique Leghorns, 2
2d do do do 1
Best Trio of Brown Leghorns, 2
2d do do do 1

No. 3.---Hamburghs.

For best Trio Gold Spangled Hamburghs, $2
2d do do do 1
For best Trio Silver Spangled do 2
2d do do do 1
For best Trio Gold Pencilled do 2
2d do do do 1
For best Trio Silver Pencilled do 2
2d do do do 1
For best Trio Black do 2

For the 2d best Trio of Black Hamburgs, $1
For best Trio White do 2
2d do do do 1
For best Trio Silkies, 2

No. 4.---Games.

For best Trio Earl Derby Game, $2
2d do do do 1
For best Trio Black Breasted Red Game, 2
2d do do do 1
For best Trio other Red Game, 2
2d do do do 1
For best Trio Gray Game, 2
2d do do 1
For best Trio Duck Wing Game, 2
2d do do do 1
For best Trio Pile Game, 2
2d do do 1
For best Trio Sumatra Game, 2
2d do do do 1

No. 5.---Polish.

For best Trio Black Polands, $2
2d do do 1
For best Trio White Polands, 2
2d do do do 1
For best Trio Golden do 2
2d do Silver do 1
For best Trio Sultans do 2
2d do do do 1

No. 6.---French.

For best Trio Crevacœurs, $2
2d do do 1
For best Trio Houdans, 2
2d do do 1
For best Trio La Fleche, 2
2d do do 1

No. 7.---Bantams.

For best Trio African Bantams, $2
2d do do do 1
For best Trio Gold Faced Bantams, 2
2d do do do 1
For best Trio Silver Faced Bantams, 2
2d do do do 1

For best Collection Exhibited, $20
2d do do 10
For best Collection Capons, 3
2d Pair of do 2
For best Device for Watering Fowls, 2
" Artificial Incubator, 2
" Artificial Mother, 2
" Hen's Nest, 1

No. 8.---Turkeys.

For best pair Wild Turkeys, $2
2d do do 1
For best do Bronze do 2
2d do do 1
For best do White do 2
2d do do do 1
For best do Black or Brown Turkeys, 2
2d do do do do 1

No. 9.---Geese.

For best pair Toulouse Geese, $2
2d do do do 1
For best pair Bremen do 2
2d do do do 1
For best pair White China do 2
2d do do do 1
For best pair Wild do 2
2d do do do 1
For best pair African do 2
2d do do do 1

No. 10.---Ducks.

For best pair Aylesbury Ducks, $2
2d do do do 1
For best pair Musk do 2
2d do do do 1
For best pair Cayuga do 2
2d do do do 1
For best pair Rouen do 2
2d do do do 1

No. 11.---Pigeons.

For best Collection, $2
2d do 1

Awarding Committee.—Geo. B. Milligan, Chm'n, Wm. Moncaster, Montgomery Co , Geo. K. Goldsborough, Talbot Co , Geo. W. Bell, Wicomico Co., H. Mowbray, Caroline Co.

Bees and Honey.

For best 10 pounds of Honey in the Comb, $5
For the best Hive filled with Bees and their Honey in the Comb, 5
For the best Hive of Italian Bees, 3
For best Hive of Bees with Moveable Combs, 3

[The honey must be taken without destroying the bees, and the kind of hive used, and the general management must be stated in writing.]

Awarding Committee.—Wm. H. Perot, Baltimore city, Wm. Hawkins, Anne Arundel County, R. N. Elder, Baltimore Co., Jas. McIntire, Cecil County, Carroll Spence, Baltimore Co.

Butter and Cheese.

For the best Fresh Butter, not less than 5 pounds, made and printed by the exhibitor, $5
For 2d best Fresh Butter, not less than 5 pounds, made and printed by the exhibitor, 3
For the best firkin or tub of Salted Butter, not less than six months old, made and put up by the exhibitor, 3
For the best Cheese, not less than 25 pounds, made by the exhibitor, 5
For best Cream Cheese, not less than 5 pounds, 2

[The method of making the Butter and Cheese, and the kind of Churn used in making the Butter, must be stated in writing by each exhibitor.]

Awarding Committee.—Dr. S. P. Smith, Robert Wiley, Baltimore city, Jas. Anderson, Baltimore Co., Robert Renwick, Baltimore city, Wm. Gillespie, Baltimore Co.

Bacon Hams.

For the best Ham, cured by the exhibitor, $10
2d do do do 5
3d do do do 3

[The Hams must be cooked with the skin on, and must be each accompanied by a written statement of the process or recipe used by the exhibitor in curing.

Awarding Committee.—Wm. Goldsborough, Chairman, J. G. Harvey, Baltimore city, Alex. D. Brown, Baltimore Co., Frank Sullivan, Baltimore city, N. B. Worthington, Anne Arundel Co.

Class F.

Agricultural Productions.

J. HOWARD McHENRY, Sup't.

Tobacco.

For the best sample, $10

Awarding Committee.—G. W. Gail, Baltimore City, Truman Belt, Prince George's County, Henry C. Gaither, Frederick County, Col. John F. Dent, St. Mary's County, Dr. Bobert Fergusson, Charles County.

GRAIN AND ROOT CROPS.

For best sample of Wheat not less than 1 bush. raised by exhibitor, $5
White Corn, do 5
Yellow corn, do 5
Rye, do 5
Barley, do 5
Oats, do 5
Irish Potatoes, do 5
Sweet, do 5
Ruta Baga, do 3
Mangel Wurzel, do 3
Clover Seed, 1 peck 5

Awarding Committee—George E. Bowdoin, Chairman, Col. James Wallace, Dorchester County, Col. Henry N. Archer, Harford County, A. R. Magraw, Cecil County, Edward Peirce, Baltimore County.

GARDEN VEGETABLES.

For the best and largest assortment, $20
2d best do do 10
For the best 12 Long Blood Beets, 3
do do Turnip Beets, 3
For the best 6 heads of Cauliflower, 3
do 6 do Brocoli, 3
do 6 do Cabbage, 3
For the best 24 Carrots, 3
do 24 Parsnips, 3
For the best 6 Egg Plants, 3
do peck of Onions, 3
do bushel Sweet Potatoes, 3
do 2 Pumpkins, 3
2d best 2 Pumpkins, 3
For best sample 4 Winter Squashes, 3
do peck of Tomatoes, 3
do dozen roots of Celery, 3

Awarding Committee.—Dr. E. J Henkle, Chairman, Alexander Rieman, Baltimore County, Chris. Fischer Baltimore City, Frank Chairs, Anne Arundel County, Milligan Gillespie, Baltimore County.

FRUITS.

For the best and most varied collection of Fruit from one farm, $15
2d do do do do 10
For the best 6 varieties of Fall Apples, not less than 5 of each, 2
For the best 6 varieties of Winter Apples, not less than 5 of each, 2
For the best and largest collection of Apples, 5
2d do do do 2
For the best 6 varieties of Fall Pears, not less than 5 of each, 4
For the best 4 varieties of Winter Pears, 4
For the best and largest collection of Pears, 6
2d do do do do 4
For the best and largest collection of Native Grapes, 6
For the best and largest collection of Grapes raised under glass, 5
For the 2d best and largest collection of Grapes, raised under glass, 3
For the best new native hardy seedling Grape (not less than four bunches) introduced within the past 2 years, 2
For the best collection of Peaches—not less than half a peck of each variety, 5
For the best late variety of Peach, not less than half a peck, 2

Awarding Committee.—Col. Wilkens, Chairman, R. Cromwell, Baltimore City, Hamilton Caughey, Baltimore City, Robert Halliday, Baltimore City, R. D. Johnson, Talbot County.

FLOWERS.

Plants in Flower.

For the largest and most select collection, $10
2d do do 5
For the best and largest amateur collection of Roses, 5
2d do do do 3
For the best and largest nurseryman's collection of Roses 5
2d do do do 3
For the best three varieties of Dahlia, 1 each, 3
do six do Fuchsia, 1 each, 3
do collection of Geraniums and Pelargoniums, 3
2d do do do 2
For the best twelve varieties of Verbena, 3
2d do do 2

Awarding Committee.—Joseph H. Bradley, Washington City, J. Hall Pleasants, Baltimore City, A. Pracht, Baltimore City, Andrew A. Hack, Baltimore City, Gen. J. Spear Nicholas, Baltimore City.

Cut Flowers and Floral Designs.

For the best collection of cut flowers, $3
2d do do 2
For the best collection of Dahlias, 3
2d do do 2
For the best collection of Roses, 3
2d do do 2
For the best original Decorative Design, 5
2d do do 3
For the best Basket with Flowers, 3
2d do do 2
For the best Vase with Flowers, 3
2d do do 2
For the best pair round hand Bouquets, 3
2d do do 2
For the best round Bridal Bouquet, 3
2d do do 2

[Articles in the foregoing class of Flowers, will be under the control of the Committee of Arrangements from the beginning to the close of the Fair, but exhibitors have the right to arrange their display according to their own taste after their respective positions have been assigned them.]

Awarding Committee.—Mrs. J. Hanson Thomas, Mrs. Geo. S. Brown, Mrs. Alexander Rieman, Mrs. Geo. R. Goldsborough, Mrs. J. Hall Pleasants, Mrs. John H. Garrett, Miss Winans, Miss Belle Devries, Miss Laura Maynard. Marshal to the Committee.—W. H. Graham.

American Wines and Cordials.

For the best half dozen dry Wine of any kind,	$5
2d do do do do	3
For the best half dozen Sparkling do	5
2d do do do do	3
For the best half dozen Sparkling Catawba,	3
do do Dry do	3
do do Norton's Virginia,	3
do do Wine of any kind, made by exhibitor from grapes grown by himself,	5
For the best bottle of home-made Cordial,	3
do do do Bounce,	3
do do do Wine,	3

Awarding Committee.—Henry E. Johnston, Baltimore City, R. D. Fisher, Baltimore City, Charles E. Walters, Baltimore City, Andrew Reid, Baltimore City, John Lee Carroll, Howard County.

Canned Fruits, Vegetables, Meats, Oysters, &c.

One hundred dollars to be distributed at the discretion of the Judges.

Awarding Committee.—Thomas Kensett, Baltimore City, John L. Shriver, Baltimore City, Gen. Thomas Wilson, Baltimore City, A. H. Habersham, Baltimore City, Thomas J. Myer, Baltimore City.

Domestic & Household Manufactures.

For best Quilt,	Diploma and $2
2d do	1
For best pair home-made Blankets,	Diploma and 3
2d do do do	2
For the best home-made Carpet,	Diploma and 2
do pair fine Woolen Knit Long Hose	Diploma and 1
do do coarse do do	Diploma and 1
For best home-made Shirt,	Diploma and 2
For best piece home-made Cloth,	Diploma and 3
2d do do	1
For the best Hearth Rug,	Diploma and 3
do pair Woolen Mittens,	Diploma and 1
do Woolen Knit Half Hose,	Diploma and 1
do specimen of Worsted Work,	Diploma and 1
do do Embroidery,	Diploma and 1
do Counterpane,	Diploma and 2
2d do	1
For the best Artificial Flowers of Wax,	Diploma and 1
do Fruit of Wax or other material,	Diploma and 3
do home-made Soap,	Diploma and 1
do do Bread,	Diploma and 2
2d do do	1
For the best home-made Pound Cake,	Diploma and 2
2d do Sponge do	2
For the best specimen of Pickles,	Diploma and 1
do do Preserves,	Diploma and 1
do do Fruit Jelly,	Diploma and 1
do do Apple Butter,	Diploma and 1

[Discretionary premiums of $1 may be awarded to meritorious articles not enumerated in the last above list]

Awarding Committee.—Mrs. Oden Bowie, Mrs. R. T. Banks, Mrs. Alexander Brown, Mrs. John Merryman, Mrs. Wm. R. Devries, Mrs. J. Hanson Thomas, Mrs. George. H. Kyle, Mrs. George Small, Mrs. G. Patterson, Mrs. C. Oliver O'Donnell, Miss Mary Fisher, Miss Rebecca Perine, Miss Eurith Stevenson, Baltimore County. Marshal to the Committee — H. R. Duvall.

Class G.

IMPLEMENTS and MACHINES.

LOUIS McLANE, Esq., Sup't.

Division No. 1.

For the best one horse Plough for geueral use,	Diploma and $4
two do do	Diploma and 6
three do do	Diploma and 6
Plough for new or rough land,	4
Subsoil Plough,	5
Hillside Plough,	5
Gang Plough,	4
Sulky or Wheel Plough,	5
One Horse Plough for Vegetables,	2
Hand Plough,	2
Potato Plough or Digger,	5
Harrow,	5
Corn Cultivator,	3
Tobacco Cultivator,	3
Horse Hoe,	3
Vegetable Hand Cultivator,	2
Clod Crusher,	8
Field Roller,	8
Grain Drill,	8
Grain Drill, with Guano and Seed attachment,	15
Broadcast Sower for Seed and Fertilizers,	10
Corn Planter for horse power,	5
Corn Planter for hand power,	2
Garden Seed Sower,	2
Lime or other Fertilizer Broadcast Spreader,	5

Awarding Committee.—Noah Walker, Chairman; Chas. R. Chew, Baltimore county; Sweetzer Linthicum, Anne Arundel county; Stephen Boyer, Kent county; Henry Kellogg, Baltimore county.

Division No. 2.

For the best machine to Thresh and Clean at one operation for from 6 to 10 horses,	$30
For the best machine to Thresh and Clean at one operation for from 2 to 6 horses,	20
For best Threshing Machine without Separator,	10
For best Straw Carrier Attachment for Thresher,	5
For best Sweep Horse Power for from 6 to 10 Horses,	15
For the best Sweep Horse Power for from 4 to 6 horses,	10
For the best One Horse Railway Power,	5
Two do do	10

For best Mowing Machine for 2 or more horses, 15
1 horse, 5
1 horse for Lawns, 5
hand power for Lawns, 5
For the best Combined Reaping and Mowing Machine, 10
For the best Combined Reaper and Mower with Dropper Attachment, 20
For the best Combined Reaper and Mower with Self-Raking Attachment, 20
For the best Machine for Reaping and Binding simultaneously, 25
For the best Hay Tedder, 10
Sulky or Wheel Horse Rake, 5
Sulky Revolving Horse Rake, 3

Awarding Committee.—Genl. Isaac R. Trimble, Chairman; Thomas A. Fitzgerald, Somerset county; Col. Wm. Wilkens. Kent county; James Wingate, Charles county; Chas. L Rodgers, Baltimore County.

Division No. 3.

For the best Grain Fan to separate Cockle, Garlic, Cheat, Rat Filth, etc., from wheat, at one operation, $10
For the best Cockle Machine, 5
Corn Sheller for Horse Power, 5
Double Spout Corn Sheller, 4
Single do do 3
Hay, Straw and Stalk Cutter for Horse Power, 8
Hay, Straw and Stalk Cutter for Hand or Horse Power,
Hay and Straw Cutter by hand power, 5
Vegetable or Root Cutter, 2
Horse Hay Fork, 5
4 Grain Cradles, 3
4 American Grain and Grass Scythes, 3
½ dozen Hand Hay Rakes, 3
½ dozen Garden Rakes, 2
½ dozen Pitch Forks, 2
½ dozen Forks for Digging, 2
½ dozen Long Handled Shovels, 2
Briar or Bramble Scythe, 1

Awarding Committee.—Horace Beck, Kent county; C. Keefer Thomas, Frederick county; E. G. Kilburn, Anne Arundel county; Charles T. Cockey, Baltimore county; Henry J. Carroll, Baltimore county.

Dirsion No. 4.

For the best Hay Press by horse power, $8
hand power, 8
large Cider and Wine Press, 8
small do do 5
Cheese Press, 3
Smut Machine, 3
Clover Huller and Cleaner, 5
Stump Puller, 5
Churn, 3
Bee Hive, 4
Platform Scales, 4
Ox Yoke and Bows, 2
Dumping Wagons, 5
Wagon Brake, 2
Self-Opening and Shutting Gate, 10
Farm Gate, 3
Portable Fence, 5
Set American made Pruning Tools, 2
Set Ditching Tools, 3
For the best Machine for Grinding Reaper Knives, 3
Road Scraper 2
Stone Breaker for Roads, 10

Awarding Committee.—A. C. Cooke, Chairman; D. C Blackiston, Kent county; Wm. B. Devries, Carroll county; J. F. Lee, Carroll county; John Hutchins, Baltimore county.

Division No. 5.

For the best Portable Steam Engine, $30
do Farm Mill, 10
Saw Mill for Lumber, 25
do Firewood, 10
Stave Machine, 5
Shingle Machine, 5
Drain Tile Machine, 5
Drain Tile, in assorted samples, 3
Best Agricultural Steamer, 10
Corn and Cob Mill, 5
Farm Pump for Hand Power, 3
do Wind Power, 5
Water Ram or other Water Elevator by Water Power, 10
Machine for Drilling Stone, 5
Cooking Stove, 5
Washing Machine, 5
Clothes Wringer; 3
Refrigerator, 3
Sewing Machine, Diploma and 10

Awarding Committee —German H. Hunt, Chm'n, John Wilkinson, Baltimore Co., Franklin Whittaker, Harford Co., Jesse Tyson, Baltimore Co., Henry R. Hazelhurst, Baltimore city.

Discretionary Premiums.

Discretionary Premiums to the amount of $150 may be distributed at the discretion of the Committee appointed therefore, for any especially new and valuable improvements.

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Class H.

Carriages and Leather Manufactures.

E. WHITMAN, Superintendent.

For the best Pair of Plough Gears. 5
Set of Single Wagon Harness for Farm, 5
Set Cart Harness, 5
Set of Double Farm Wagon Harness, 8
Set of Carriage Harness, 10
Set Buggy Harness, 5
Farm Saddle, 3
Man's Saddle and Bridle, 5
Lady's Saddle and Bridle, 5
Travelling Trunk, 5
Lot Wagon Whips, not less than 6, 2
Carriage do do 4
Gentleman's and Lady's Riding Whips, not less than 6, 3

For the best 2-Horse Family Carriage,	20
Trotting Buggy,	10
1-Horse Family Carriage,	15
Jersey Wagon for general use,	15
Shifting Top Buggy,	15

Awarding Committee.—Alfred Jenkins, Chairman, Henry Tyson, Baltimore city, Gen. J. S. Berry. Baltimore city, Geo. Appold, Baltimore city, James Tyson, Baltimore city.

Class I.

MISCELLANEOUS.

Dr. W. H. DeCOURCY, Superintendent.

For best Essay on Farm Drainage,	$20
Rotation of Crops,	20
For best Essay on Cultivation of Root Crops for Cattle,	20
For best Landscape in Oil by Maryland Artist,	Diploma and $15
For best Landscape in Pencil Drawing by Maryland Artist,	Diploma and $10
For best Cattle Painting by Maryland Artist,	Diploma and $15
For best Assortment of Photographs by Maryland Artist,	Diploma and $10

Awarding Committee—Wm. T. Walters, Hon. Henry Fernandis, Harford Co., Wm. H. Norris, Baltimore city, Wm. H. Graham, Baltimore city, C. L. Mayer, Baltimore city, Geo. B. Coale, Baltimore city.

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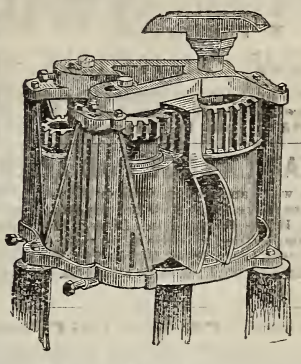

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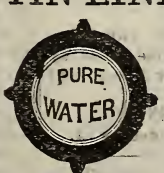

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FOR SALE BY

WILLIAM REYNOLDS,

79 SOUTH STREET, BALTIMORE, MD.

And by dealers generally throughout the country. For information, address Henry Bower, Philadelphia. aug-tf

SPIRIT MYSTERIES.—Marvelous Feats of the **Davenport Brothers**, &c., fully exposed and explained in HANEY'S JOURNAL, of any newsdealer, or Six Months on Trial to any *new* subscriber only 25 cts

☞ Book and Job Printing of every description neatly executed at this office.

BONE DUST.

The subscriber has just erected at his farm, near the city, the most improved machinery for making

BONE DUST,

And is now ready to fill orders for any quantity, which will be delivered at the shortest notice. The Bone Dust will be finer than any heretofore made by him, (no chemical process resorted to,) enabling the farmer or planter to sow it with the Drill.

Mr. SAMUEL SANDS,

Well known to the farmers and planters of the United States as the former editor of the *American Farmer* and *Rural Register*, will have charge of his office, No. 63 S. GAY STREET, near Pratt, and will be happy to receive the visits or orders of his old friends.

$45 PER TON, put in new bags. No charge for bags. Farmers and others are invited to visit my works. I have nothing to conceal. My men have nothing nice to perform, therefore I have no "non admittance" signs on my premises. Persons are free to examine my factory, and the *modus operandi* of Dust-making.

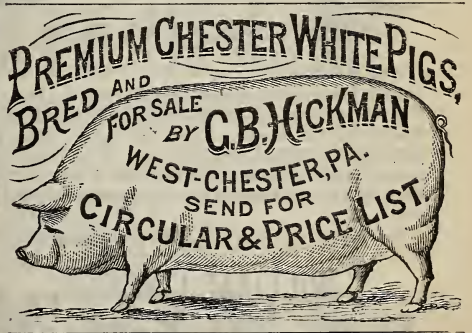
I cannot afford to pay 5, 10 or 20 per cent. to commission merchants, as my profits do not exceed 10 per cent. Bone Dust, as manufactured by me, is *A simple*, and its quality cannot be made to conform to the price.

JOSHUA HORNER,

OFFICE, 54 SOUTH GAY STREET, near Pratt,

Or **Cor. Chew and Stirling Sts.**

aug-6t **BALTIMORE, MD.**



Aromatic Vegetable Soap.

For the Delicate Skin of Ladies and Children.

SOLD BY ALL DRUGGISTS

HENRY GIBSON,

MANUFACTURER OF

TUBULAR DRAINS,

IN GLAZED STONEWARE.

ALSO,

DRAIN TILES.

LOCUST POINT,

Baltimore.

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THE ROCHESTER

BERRY BASKET

The Best Ventilated Basket yet Offered.

LIGHT, DURABLE AND LOW PRICED.

Fruit looks well, carries well and sells well in them.

Agents wanted in every fruit growing section.

Send for circulars to the General Agents.

COLLINS, GEDDES & CO.,

feb-tf Moorestown, N. J.

BELMONT

STOCK FARM.

I am breeding thorough bred Horses, the Imported Percheron Norman Horses, and the Black Hawk Branch of the Morgan Stock, for sale. Also Pure bred Short Horn Cattle, Chester White and Albemarle Improved Swine, (the latter a cross of Woburn and Chester Whites,) and Bramah Fowls for sale.

S. W. FICKLIN,

june-1y near Charlottesville, Va.

WILLIAM LINEKER,

Landscape Gardener,

wishes to notify the public that he is prepared to LAY OUT NEW GROUNDS in the neatest and newest styles and on most reasonable terms. All kinds of Garden Work, including Cemetery Lots, &c., will receive prompt attention, and be executed with practicability. In view of our long experience as a practical Gardener, we can guarantee satisfaction to all favoring us with orders. All kinds of PLANTS and TREES at Nursery prices. Residence—41 PENN STREET.

NEW AND RARE PLANTS.

The subscriber offers for sale on the most liberal terms many new

HARDY EVERGREENS,

of unsurpassed beauty. Also, a large collection of HOT and GREENHOUSE PLANTS, selected while in Europe, and still quite rare here. Also, everything worthy of notice, with Cut Flowers, Boquets and Plants for Decorations furnished on the lowest terms.

JOHN FEAST, Florist,

295 Lexington Street,

BALTIMORE, MD.

P. S.—Having assumed the business of JOHN FEAST & SONS, it will hereafter be carried on in my own name. All orders will be punctually attended to for cash, or satisfactory reference.

jan-tf JOHN FEAST.

A GREAT OFFER!

ONLY $3, FOR $11, IN VALUE.

Until the first of November next, the beautiful and artistic Chromo,

"Isn't She Pretty."

Size, 13 x 17, after Lillie M. Spencer, retail price, $8.00; will be sent by mail securely done up, post free, as a premium to every yearly subscriber to

DEMOREST'S ILLUSTRATED MAGAZINE,

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MIRROR OF FASHIONS,

acknowledged the most practical, useful, original Parlor Magazine.

"Isn't She Pretty," is a beautiful Chromo, a splendid Parlor Picture, and a valuable work of art; it is highly finished, mounted and varnished, and *worth more than double the cost of subscription*, and together with DEMOREST'S MONTHLY, affords an opportunity for the investment of Three Dollars, *such as may never occur again.* Do not fail to subscribe for "DEMOREST'S MAGAZINE," and you will never be willing to be without it. It will not only teach you how to dress, how to cock, how to make over your children's clothes, but it will make you better, wiser, happier. Women everywhere find it exactly what they want. In fact, it is the most complete Ladies' Magazine now published—Husbands, Fathers, Brothers and Lovers subscribe for it, and present it with the beautiful Chromo, "*Isn't She Pretty.*" It will make eyes sparkle with delight and satisfaction, and prove a monthly reminder of your good taste and kind feeling.

Address,

W. JENNINGS DEMOREST,

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Specimen Copies of the Latest Nos. of the Magazine mailed free on receipt of 25 cent. je-tf.

We have a *limited* supply of

St. LOUIS BONE FLOUR,

The particles of which are about the size of Timothy seed. *We recommend this as something very superior.*

We will send a sample, by mail, to any one desirous of seeing it, and think an examination will convince any one of its superiority over anything in the market.

Price $48 per ton of 2000 pounds.

E. WHITMAN & SONS,

mar-tf No. 145 W. Pratt st., Baltimore, Md.

Pennsylvania Agricultural Works,

YORK, PENNSYLVANIA.

A. B. FARQUHAR, Manager and Proprietor.

The Pennsylvania Agricultural Works is one of the most extensive establishments of its kind in the United States. It is furnished with improved Machinery, Foundry, Forging Rooms, Planing and Sawing Mills, Lumber Yard, &c., complete within itself. We are situated among the great Iron, Coal and Lumber fields, which form the basis of all manufacturing; and I would respectfully call the attention of the public to these advantages, confident of meriting an extended patronage.

The following are among my specialities:

PLOWS.

Polished, Hardened Steel and Cast Iron. Farquhar's Cast Steel Model Plow, one and two horse, warranted in any soil, and under all circumstances, *second to none.*—American Clipper, Full Steel, one, two and three horse. Atwood and Ohio Cast Plows, two and three horse. Subsoil Plows, Steel soled, two and three horse. Hillside or Swivel Plows, &c., &c.

Shovel Plows, Cultivators, Sulkie Plows

Made of the best White Oak, or Refined Iron Beams, with hardened Steel Shovels, Plain or Reversible.

KEYSTONE CORN PLANTER, with PHOSPHATE ATTACHMENT, works perfectly with any size Corn and any pulverized Fertilizer.

AGRICULTURAL STEELS.

Cultivator Teeth, hardened steel, Shovel Plow Blades, Cotton Scrapers, Improved Dickson Cotton Sweeps, &c., all of best Steel, made expressly for my use.

Pelton Triple Geared Horse Powers.

This celebrated Horse Power is fast taking precedence wherever introduced; it is more economical, durable and lighter of draft than any other. I make all sizes from two to ten horse.

THRESHING MACHINES.

Of all sizes, for both Gear and Belt.

RAILWAY HORSE POWERS with SEPARATORS.

FARQUHAR'S SEPARATOR.

From two to ten Horse Power; simple, strong and durable. Turbine Water Wheels, Mill Gearing, Plow Irons and Castings, &c.

PLOW HANDLES.

Having improved Blanchard machinery for the manufacture of Plow Handles upon an extensive scale, I can supply first quality Handles, side bent to order for any pattern of plow.

☞ For further particulars, send for Illustrated Catalogue and Price List.

feb-1y **A. B. FARQUHAR, York, Pa.**

MORO PHILLIPS'

GENUINE IMPROVED

SUPER-PHOSPHATE OF LIME.

STANDARD GUARANTEED.

Reduced in price, and *improved in quality by the addition of Potash.* This article is already too well known to require any comments upon its Agricultural value. Ten years experience has fully demonstrated to the agricultural community its lasting qualities on all crops, and the introduction of Potash gives it additional value.

Price $50 Per Ton, 2000 lbs. Discount to Dealers.

PURE PERUVIAN GUANO.

Superior to Peruvian Guano. Patented April 29, 1860.

Manufactured by MORO PHILLIPS.

Price $50 Per Ton---2,000 Pounds. Discount to Dealers.

For sale at Manufacturer's Depots: 110 S. DELAWARE AV., Philadelphia, Pa.; 95 SOUTH STREET, Baltimore, Md.

And by Dealers in general throughout the country. Pamphlets mailed free on application.

MORO PHILLIPS,

ap-1y **Sole Proprietor and Manufacturer.**

GROVER & BAKER'S

HIGHEST PREMIUM

ELASTIC STITCH

FAMILY SEWING MACHINES.

POINTS OF EXCELLENCE.

Beauty and Elasticity of Stitch.
Perfection and Simplicity of Machinery.
Using both threads directly from the spools.
No fastening of seams by hand, and no waste of thread.
Wide range of application without change of adjustment.
The seam retains its beauty and firmness after washing and ironing.
Besides doing all kinds of work done by other Sewing Machines, these Machines execute the most beautiful and permanent Embroidery and ornamental work.

The Highest Premiums at all the Fairs and Exhibitions of the United States and Europe have been awarded the Grover & Baker Machines, and the work done by them, wherever exhibited in comparison.

☞ The very highest prize, THE CROSS OF THE LEGION OF HONOR, was conferred on the representative of the Grover & Baker Sewing Machines, at the Exposition Universelle, Paris, 1867, thus attesting their great superiority over all other Sewing Machines.

SALESROOMS,

No. 17 North Charles Street,

BALTIMORE, MD.

jan-ly

BALTIMORE MARKETS---July 1.

Prepared for the "Maryland Farmer" by **GILLMORE & SON**, Produce Commission Merchants, 194 W. Pratt st.

[*Unless when otherwise specified the prices are wholesale.*]

ASHES.—Fair demand; $6.75@7.25

BEESWAX.—Active market at full prices; 34 to 37 cts. for good to prime.

BROOM CORN.—Red, 4@5 cts.; Green, 6@7 cts.

BUTTER.—Receipts on the increase; prices range from 16 to 22 for good to choice.

COTTON.—Market has more animation than last week, and prices firmer.

	Upland.	Gulf.
Ordinary	15 cents.	15½ cents.
Good ordinary	18	18½
Low middling	19½	20
Middling	20½	21

COFFEE.—Very active market, prices ranging for fair to prime 14½ to 16 cts.

EGGS.—Market dull. Fresh, in carriers, 17 cts.; do., in barrels, 14 to 15 cts.

FERTILIZERS.—No change to note. We quote:

Peruvian Guano—gold	$68	₮ ton of	2000 lbs.
Orchilla and Rodonda	30	₮ ton	"
Turner's Excelsior	60	₮ ton	"
Turner's Ammo. S. Phos.	50	₮ ton	"
E. F. Coe's Ammo. S. Phos.	55	₮ ton	"
Ober's Phospho-Peruvian Guano	65	₮ ton	"
Ober's Super-Phosphate of Lime	55	₮ ton	"
Soluble Pacific Guano	60	₮ ton	"
Patapsco Guano	60	₮ ton	"
Flour of Bone	60	₮ ton	"
Andrew Coe's Super-phosphate	52	₮ ton	"
Baugh's Raw Bone S. Phos.	50	₮ ton	"
Excellenza Cotton Fertilizer	56	₮ ton	"
Excellenza Soluble Phosphate	56	₮ ton	"
Excellenza Tobacco Fertilizer	60	₮ ton	"
Meat and Bone Guano	40	₮ ton	"
Magnum Bonum Soluble Phos.	52	₮ ton	"
Ruth's "Challenge' Sol. Phos.	60	₮ ton	"
Zell's Raw Bone Phosphate	56	₮ ton	"
Rhodes' do	50	₮ ton	"
Mapes' do	60	₮ ton	"
Bone Dust	45	₮ ton	"
Horner's Bone Dust	45	₮ ton	"
Dissolved Bones	60	₮ ton	"
Baynes' Fertilizer	40	₮ ton	"
"A A" Mexican Guano	30	₮ ton	"
"A" do. do.	30	₮ ton	
Moro Phillips' Super-Phosphate	56	₮ ton	
Whann's Raw Bone Super Phos.	56	₮ ton	
Md. Fertilizing & Manufacturing Co's Ammoniated Super-Phosphate	55	₮ ton	
Fine Ground Bone Phosphates	30	₮ ton	
Plaster	$2.25	₮ bbl.	

FLOUR.—Dull market; prices weak, with a downward tendency.

City Mills Super	5.00	@	5.50
" Extra	6.25	@	6 50
" Family			$10.00
Howard Street Super	5.00	@	5.75
" " Extra	6.00	@	6.25
" " Family	7.25	@	8.00
Western Super	5.00	@	5.75
" Extra	6.00	@	6.25
" Family	7.00	@	8 25

GRAIN.—*Wheat*, with free receipts; prices are declining. For new Red, $1.45@$175 per bus. *Corn*, receipts large; 73@76 cts for Yellow, and 75@78 for White. *Oats*, heavy receipts; 60 cts. for prime.

MILL FEED.—Market firm; Brownstuffs 27@30 cts.; Middlings 37@40 cts.; heavy 50@55 cts. per bus.

MOLASSES.—Steady; Porto Rico. 40@55 cts., and English Islands, 38@45 cts.

PROVISIONS.—Market active; prices advancing. Hams 15@17 cts.; Sides, 9½@10 cts.; Shoulders, 7½@8 cts.

POULTRY.—Old Fowl, $5@$6.00, and Spring Chickens, $2.50@4.50 per dozen.

SALT.—Ground Alum, $1.30 to $1.40; Fine $1.85 to $1.95 per sack; Turk's Island, 45@50 cts. per bushel.

WHISKEY.—Dull at 98 cts.

J. WILKINSON,

LANDSCAPE GARDENER,

RURAL ARCHITECT,

AND

DRAINING AND IRRIGATING ENGINEER,

OF BALTIMORE, MD.

Gratefully cknowledges the liberal patronage given him in the various branches of his profession, for the past twenty years, a continuance of which he respectfully solicits.

It is his purpose to continue to make Baltimore his headquarters, but he will promptly respond to calls from all parts of the country.

He will visit and prospect places to be improved, and will furnish plans of the grounds, on which every feature of improvement and decoration will be located to a scale, and specifications will be furnished, which will make the plans intelligible to the inexperienced in the art of landscaping.

He will furnish plans and specifications for Farm Barns, and all other Farm Buildings, Carriage Houses and Stables, for both city and country, Gate Lodges, with his Magic Gate arrangement, Dairies, Ice Houses, with Dairies and Refrigerators attached, Summer Houses, Graperies, both heated and cold, Bridges, Bath Houses of ever description, &c.

He will give counsel in every branch of Agriculture, in which he has had a long and practical experience having been for eight years the proprietor and principal of an Agricultural School and Experimental Farm.

He would invite special attention to his plans of Farm Buildings, for which he received the highest prize ever awarded in this country; also, to his original modes of constructing underdrains and sewers, and of irrigation. He will furnish plans for *heating* buildings of any form or dimensions, and will *ventilate* any cellar, vault or apartment, modifying the ventilation to all circumstances, conditions and purposes, in all of which he guarantees satisfaction. References given if desired. Address

Post Office Box 1127, Baltimore, Md.

je tf Office Cor. Charles and Baltimore Sts.

FRUIT RECORDER and COTTAGE GARDENER.

ENLARGED, 1871, to 16 pages, at $1 per year. All we ask is for you to see a copy of the Paper, (which we send *free* to all applicants,) and *let it speak for itself*. The Premiums that we offer in Plants and Flowers to those getting up Clubs, would cost you as much at any responsible Nursery as we charge for the paper. Show Bills, Sample Copy, etc., sent free on application to

A. M. PURDY, Palmyra, N. Y.

LEACHED ASHES! LEACHED ASHES!!

5000 to 10,000 Bushels Leached Ashes, for sale by

JAMES WEBB,

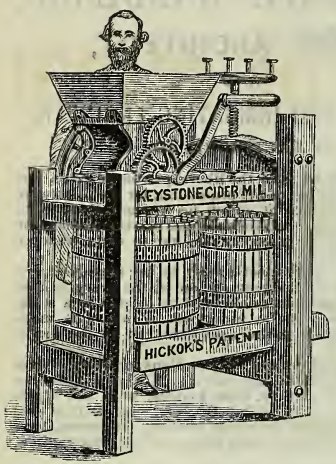
Soap and Candle Factory,

Corner Chew and Ensor Streets,

mar-tf Baltimore, Md.

WHALE CHASE—A splendid boys' story full of stirring adventure and interesting details of life aboard a whaler, just commenced in No. 39 of HANEY'S JOURNAL. On trial to any *new* subscriber *three months* for only TEN cents. "Specimens" of newsdealers *only*. JESSE HANEY & CO., 119 Nassau-st., N. Y.

THE KEYSTONE CIDER AND WINE MILL



Is so well known, and is so great a favorite, and has been for the past fifteen years, that we hardly feel that it is necessary to say much about it. They are sold from the State of Maine to the Gulf of Mexico, and are looked upon everywhere as the STANDARD MILL of the day. *There is hardly a Mill now made but is taken from the Keystone, and is as near like it as the patents will admit.*

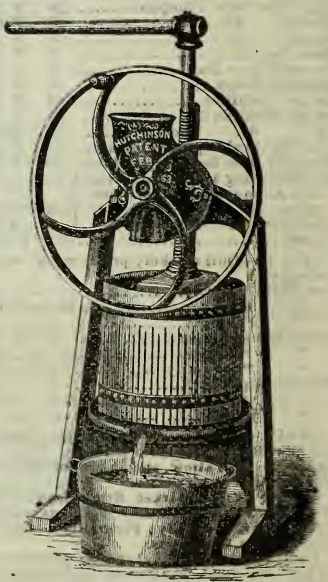
This mill will make twenty five per cent. more cider from the same quantity of apples than any other portable mill in the market, and with more ease, and is much more durable. Price - - - - $40.

E. WHITMAN & SONS,
Manufacturers and Sole Agents for
BALTIMORE, MD.

THE HUTCHINSON CIDER AND WINE MILL.

This Mill is used extensively for family use for making Blackberry and other Wines and Cordials, and also for making Cider. For the purposes for which it is designed, viz., a cheap Mill for family use, it has no equal, of which the thousands sold anually are an abundant proof. We have during the last few years sold hundreds of them and can unhesitatingly recommend them.

Price $22.



E. WHITMAN & SONS, Sole Agents for Baltimore, Md

R. SINCLAIR & CO.

MANUFACTURERS OF

AGRICULTURAL IMPLEMENTS AND MACHINERY,

GROWERS AND IMPORTERS OF

GARDEN AND FIELD SEEDS,

TREES, PLANTS, &C.

62 LIGHT STREET,

BALTIMORE, MD.

—o—

Offer to the farmers of Maryland and the Southern States the following valuable Labor-Saving Implements and Machinery, the most of which are of their own manufacture, and are guaranteed to give entire satisfaction to the farmer and planter:

"ADVANCE MOWER" or "IMPROVED MONITOR"—the simplest, strongest and most efficient Mower in the country.

"NEW YORKER" Self-Rake Reaper and Mower, and REAPER only.

"CHAMPION" Reaper and Mower, with either Self-Rake or Dropper Attachment.

Maryland Sulky Self-Discharging HAY AND GRAIN RAKE—the best in use.

"PHILADELPHIA" HAND AND HORSE LAWN MOWERS. Warranted the best in use.

Rogers' Patent Harpoon Horse Hay Fork.

"BUCKEYE" SULKY CULTIVATOR, for working Corn, Tobacco and Cotton crops.

SINCLAIR'S Southern Iron-Brace Grain Cradles.

"Scully's" Patent CIDER AND WINE MILL AND PRESS COMBINED, unequalled for efficiency.

THRASHERS AND SEPARATORS. "Geiser's," "Westinghouse's" "Wheeler's," and other first-class Cleaners.

HORSE POWERS—"Pelton's" Triple Gear, some 5 sizes. Spur Gear Powers, and other good varieties.

"Sinclair's" Patent Screw Propellers and Masticators, for cutting Corn Stalks, Hay and Straw for cattle feeding. These are the premium Cutters of this country.

CORN SHELLERS—All kinds and sizes, both for hand and horse power.

SINCLAIR'S PATENT CORN PLANTER, which plants the Corn any distance required, covers and rolls the land—the most perfect Planter of the day.

GARDEN DRILLS—"Comstock's," "Wethersfield," Planet and other Seed Drills.

WHEAT AND GRAIN DRILLS—"Bickford & Huffman's," "Wagoner's," "Buckeye," and all the best kinds made.

Lime Spreaders, Plaster Sowers, Hay Tedders, Grist Mills, Corn and Cob Crushers, Hay Presses, Iron Field Rollers.

Agents for "Thomas'" Smoothing Harrow, for cultivating Corn and Wheat lands.

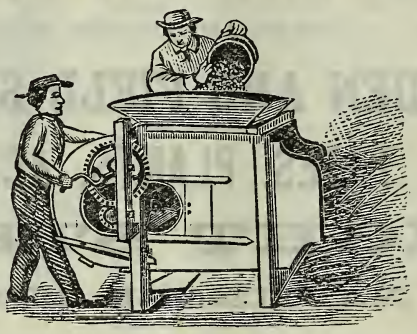
Wheat Fans, Pumps, Improved Churns, Horse Shovels, Plows, Harrows, Cultivators, all kinds and sizes. Plow and Machine Castings, Agricultural and Horticultural Hardware.

Address,

R. SINCLAIR & CO.

ap-tf **No. 62 Light Street, Baltimore, Md.**

MONTGOMERY'S
ROCKAWAY WHEAT FANS.



Have been proven by a great many trials, in which they have beaten every Fan of any pretensions sold in the Southern States, to be undoubtedly the best Wheat Fan ever invented.

The Committees of one hundred and forty-five Fairs have decided that it was the best, and have given it the premium.

In the fall of 1870 it competed with all the Fans made in Maryland, Virginia and the adjoining States, and in every case came out victorious, persons being surprised to see with what ease it defeated Fans claiming great improvements.

It is the only Fan that will take garlic out of wheat.

It is the only Fan that will take oats out of wheat with any degree of certainty.

It will separate corn, gravel, rat filth, &c., from wheat.

It will take out more cockle than any other Fan.

It is the cheapest Fan in the market when you take into consideration the substantial manner in which it is made, and the number of sieves and screens to each Fan, and other valuable arrangements for separating oats, garlic, cheat, gravel, &c., from the wheat.

Each Fan is made under the superintendence of the inventor, who has for the past thirty years devoted his entire attention to the manufacture of Fans.

PRICE—No. 1.....$44 00
No. 2..... 42.00

Manufactured and for sale by

E. WHITMAN & SONS,

Nos. 145 and 147 West Pratt Street, Baltimore, Md.

Excelsior Wheat Fans.

These are as good as any Fan in the market excepting the Montgomery.

PRICE $30.

Manufactured and for sale by

E. WHITMAN & SONS,

Nos. 145 and 147 West Pratt Street,

BALTIMORE, MD.

may-tf

PURE
GROUND BONES.

The richest preparation of this article offered, containing 8 per cent. of Ammonia, and 40 per cent. of Bone Phosphate of Lime. The purity of this Bone can be seen by the small amount of insoluble matter—less than one-third of one per cent. FOR SALE IN BAGS, in lots to suit. Also,

THE CELEBRATED

Ammoniacal Matter,

Containing some 13 per cent. of Ammonia, in the form of Nitrogen—superior to Peruvian Guano—and so pronounced by Professors Genth, Liebig, Piggott, Tonry, Wilson and Dr. Pendleton, of Sparta, Ga.

ALSO,

Pendleton's Guano Compound

AND

SOLUBLE SEA ISLAND GUANO,

IN STORE AND FOR SALE.

Dr. T. B. WEST, of Columbia County, Ga., says: Of the seventeen different fertilizers used, Pendleton's Compound is largely ahead in value. Of the eighty four planters in Hancock using this Guano, all are pleased and endorse it.

SOLUBLE SEA ISLAND GUANO.—CHAS. R. MARTIN, of Chesterfield County, Va., says: Used on Corn, Tobacco and Onions. It is superior to any fertilizer used by me for the last ten years.

Extract from the Petersburg Courier of Feb. 1, 1871.

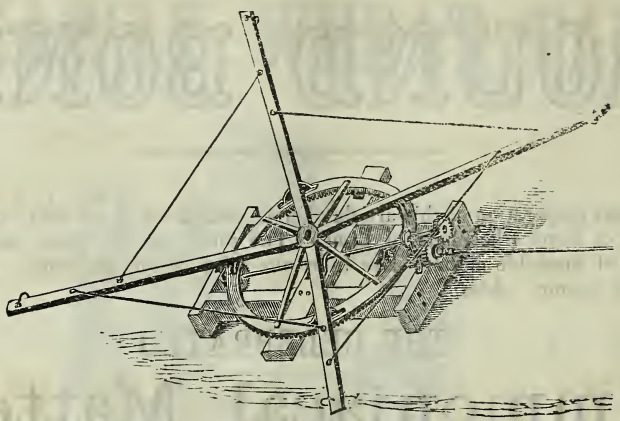
SOLUBLE SEA ISLAND GUANO.—We desire in a short time to give a full account of this valuable article, as it is recommended to us by some of the best farmers in our section as being the "best Guano now used for the production of Tobacco and Vegetables."

R. W. L. RASIN & CO.

32 SOUTH STREET,

feb **Baltimore, Md.**

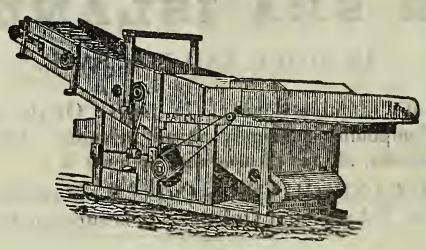
Horse Powers, Threshers & Cleaners.



Whitman's Double Geared Horse Power, (the most substantial power made,)	[illegible]00
Pelton Triple Geared Power, 10 horse	125 00
" " " 8 "	120 00
" " " 6 "	110 00
" " " 4 "	90 00
Whitman's Two Horse Railway Power	165 00
" One " "	130 00
" 24 Inch Premium Iron Cylinder Thresher	80 00
" 20 " " " "	70 00
Straw Carrier for either size Thresher	25 00

WESTINGHOUSE THRESHER & CLEANER,

IN BALTIMORE.



No. 1, 36 Inch Cylinder, for 10 Horse Power	$300 00
2, 30 " " 8 "	285 00
3, 30 " light 4 "	275 00

WHEELER & MELICK THRESHER and CLEANER,

IN BALTIMORE.

34 Inch Cylinder, Weight 1,370 pounds	$275 00
30 " " 1,100 "	250 00
26 " " 1,000 "	240 00

For sale by

E. WHITMAN & SONS,

may-tf Nos. 145 and 147 W. PRATT STREET, Baltimore, Md.

2,000 BARRELS

Best Nova Scotia Ground Plaster,

Just arrived and for sale by

E. WHITMAN & SONS,

No. 145 West PRATT STREET,

BALTIMORE,

AGENTS FOR THE

PORTLAND PLASTER MILLS.

Put up in good, tight Barrels of 320 pounds each.

mar tf **Price $1.75 Per Barrel.**

TO CORN GROWERS!

—o—

J. J. TURNER & CO.'S

AMMONIATED

Bone Super-Phosphate.

—o—

ANALYSIS—Ammonia.....2.83

Soluble Phosphate of Lime.....29.51

Bone Phosphate of Lime.....10.67

Composed of the most concentrated materials, it is richer in Ammonia and Soluble Phosphates than any other fertilizer sold, except our "EXCELSIOR," and is made with same care and supervision. Uniform quality guaranteed Fine and dry, in excellent order for drilling. Packed in bags and barrels. ☞ PRICE $50 PER TON.

J. J. TURNER & CO.

jan-1y **42 Pratt Street, Baltimore, Md.**

WILKINSON'S

Patent Horse Stall

Patented April 25th, 1871,

By J. WILKINSON,

Rural Architect, of Baltimore, Md.

OFFICE,

COR. CHARLES & BALTIMORE STS.

Horse owners are respectfully informed that I am now offering Stable Rights, also Territorial Rights, to the use of my Patent Horse Stable, on terms so low as to secure their general and speedy introduction.

As my Stall enables horse owners to dispense with all bedding, and effects a large saving of both hay and grain, livery men and others have decided that they cannot afford to do without it. John Meeth, Esq., has just erected a fine Hack and Livery Stable, corner of Republican and Saratoga Sts., Baltimore, all the Stalls of which, 30 in number, are supplied with my Patent System of Drainage, which Mr. Meeth says, not only gives him the most cleanly and comfortable Stable that he has ever seen, but that the saving arising from the improved drainage, will pay the cost of the Patent in a few months; and that he is satisfied that the floors of the Stalls will last more than twice as long as the same materials would, if constructed on the old system.

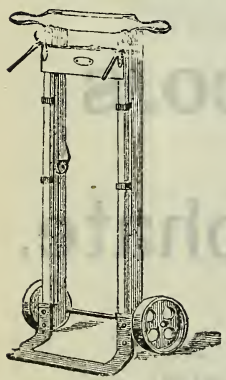
Were it necessary, I might name numerous other gentlemen, in various parts of the country, who are using my Patent Horse Stall with the fullest satisfaction.

J. WILKINSON,

may-tf. *ARCHITECT, Baltimore, Md.*

HOSTETTER'S

BAG HOLDER AND TRUCK.



Farmers, Miller, and all other persons who fill and handle bags or sacks, are invited to give their attention to the merits of this invention which combines the great convenience and utility of a complete bag holder, with the usefulness of a truck moving the bags from place to place, thus effecting a great saving of labor in filling and handling, and in the wear of the bags; at same time the truck is convenient to use for moving other heavy articles.

By reference to the cut the construction and operation will readily be understood. A quite simple and very effective bag holder is fixed on a neat sliding frame which is securely attached to the truck in such a manner that it can be instantly adjusted at any required height, and will hold on there until moved. The truck when placed in position, the bow, or front plate, resting on the floor, stands firm and steady, perfectly upright. The mouth of the bag is stretched quite open over the rods, and firmly held by button clamps; the peculiar shape of the rods holding the front side of the bag lowest, making it easy to fill into. The bottom of the bag is made to rest on the bow (or curved plate in front) of the truck, by adjusting the sliding frame. The bag being firmly held by the holder to the truck it can be trucked to another place while open, or it may be closed on the truck.

The frame and top-piece of the truck being flush in front, the sliding frame can be put up high enough to hold a very long bag, while the handles ars always conveniently low. The Truck stands on a space 14 inches square, is 42 inches high, and weighs about 24 pounds. For sale by E. Whitman & Sons, 145 Pratt Street, Baltimore, Md.

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